

FANTASTIC

PULL-OUT POSTER!

TURN TO THE CENTRE PAGES!

A NEWSFIELD PUBLICATION
NO. 61 FEBRUARY 1989

£1.25

CRASH

ZX SPECTRUM

SMASHED! LED STORM

*The hottest action
from US Gold!*

HONOURABLE MENTIONS TO...

- LAST DUEL
- FIRE AND FORGET
- RETURN OF THE JEDI
- SKATEBALL
- BLASTEROIDS
- ELIMINATOR
- THE MUNSTERS
- HUMAN KILLING MACHINE
- THE GAMES: SUMMER EDITION
- WHO FRAMED ROGER RABBIT

SPECIAL FEATURE COMPUTERS ON FILM

FROM 2001 TO WARGAMES AND TRON

FREE HOLIDAY FEVER!!

WIN!

WIN! ★ A WEEKEND
TRIP TO PARIS!

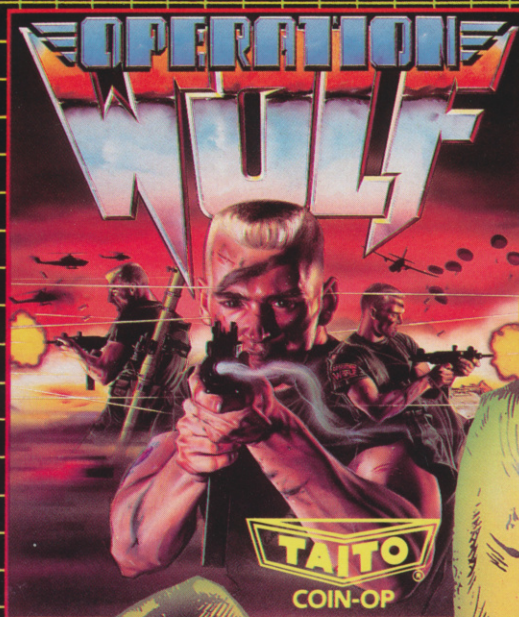
★ 1990 VACATION
IN FINLAND!

WIN!

MORE TERRIFIC PRIZES IN OUR 0898 COMPETITION
YOUR TELEPHONE WILL NEVER SEEM THE SAME AGAIN



THE OCEAN



THE WORLD'S NO. 1 ARCADE GAME
NOW THE COMPUTER SENSATION OF
THE YEAR.

"It's undoubtedly a fantastic
conversion of a marvellous arcade
game. Virtually flawless. Addictive...
One for everyone's Christmas list."

SINCLAIR USER

"Not only has all the action and
gameplay been captured, but so has
the excitement, making it one of the
most satisfying and compulsive
shoot-em-ups to have appeared in a
long time" ACE

Your Opponents in your battle for
supremacy are four types of Evil
Ninja star-throwing Assassins whose
skills are manifold and dangerous.

Also out to spoil your day are
Acrobatic Women Warriors and
vicious Guard Dogs.

At the end of each level you must
overcome the Ninja Master in order
to progress - some examples of
these superhuman villains are: A
fire-breathing Fat Man, an Armour
Clad Giant and the Green and
Gruesome Giant Ninja - who has a
disconcerting habit of suddenly
multiplying into an army!

**DE DATA
EAST**



SPECTRUM

AMSTRAD

COMMODORE

ATARI ST

AMIGA

£8.95

£9.95

£9.95

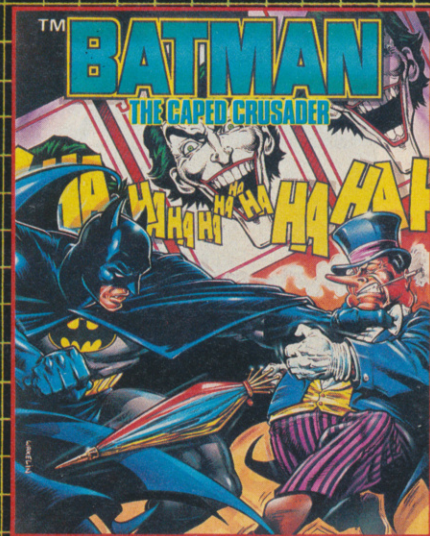
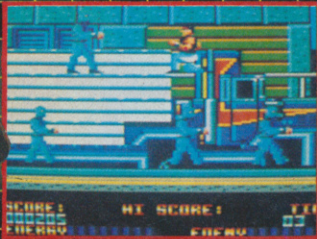
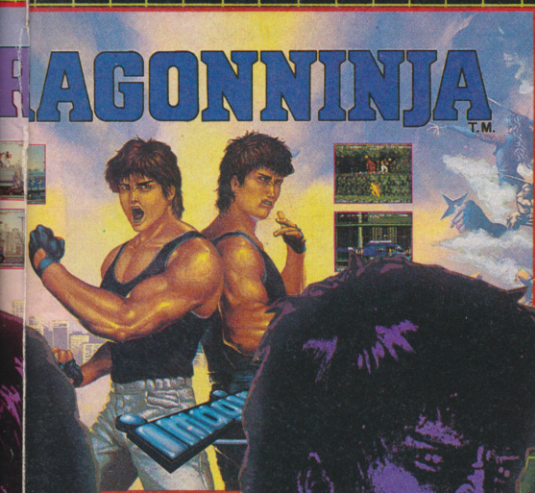
£19.95

£24.95

Also available on disk



AN FORCE



D.C. Comics' famous super hero Batman breaks onto the micro screen in a Wham! POW! Arcade adventure as you engage the forces of evil in Gotham City. Start in the Batcave and move on through the world of fun and excitement as you face the trickiest customer of all... the Penguin. Save some strength for battles ahead with the dastardly Joker however, or you'll miss the thrilling climax! Cartoon style graphics and animation make for stunning realism with

innovative game play for long lasting entertainment.

TM & © DC COMICS INC. 1988
ALL RIGHTS RESERVED



CRASH

ZX SPECTRUM

CONTENTS

PULL-OUT OLIPOSTER

I've done even better than setting a new pen this month, I've actually got a proper font. (They say you won't be able to read this either, though!) Just a quick note about cover-cassettes. We'll only be putting cassettes on the cover when we find two (or more) games suitable enough for cover-mounting - we won't just stick stuff on the cover just for the sake of it.

This month's issue sees a very violent character taking abode of Samara's quill and doing unmentionable things with it (p.25); an innovative new telephone information service (p.22); and a great feature on computer films (p.50). Not too many great games this month; with only LED Storm, Skateball and Blackbeard definite buys. Talking of Blackbeard, reminds me of the new budget review section and a new award (p.66).

Next month we start an informative feature on software houses. In the coming months we've got loads more features (and lots of surprises). So why not take a subscription out now (p.82). Right, that's enough promotion, on with the real writing...

Don Hancock

As we enter the New Year, CRASH brings you your very own Oliposter. Hopefully we'll be getting Oli 'master of the airbrush' Frey to continue the trend throughout the year. Watch out for more from this great artist!

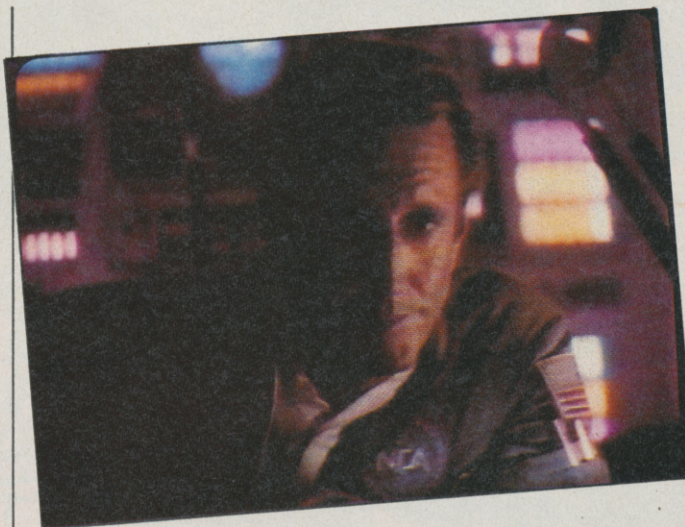
PUZZLING FILM YEAR

Over the past year CRASH has reviewed almost three hundred new games. From the disappointment of Zolyx to the playable surprise of Ocean's Firefly. One CRASH reader has spent the past month compiling the complete review index of the year. All the info on all the games released over the past year.

Percentages pickled 32

Computers have always been fair game for film producers. We look at the film phenomenon of electronic enhancement. From the breathtaking effects of 2001: A Space Odyssey to the startling computer characters of Tron. Computers can make great stars! (Computer controlled machines - cyborgs etc - soon!) Phillipson's films 68

One of the most popular sections of the amazing Christmas CRASH was the 16-page puzzle spectacular. Oli Frey spent the whole of Christmas trying to puzzle out that terrific wordsearch. This month we bring you the definitive answers to solve all those Christmas conundrums. Don't waste a moment, all is revealed. Simple solutions 84



DO IT YOURSELF

22 **PHONE FROM HOME** ... and win some terrific prizes in this most original of competitions

56 **HE CLIPS FOR FINLAND** ... travel to Finland for the next eclipse thanks to Incentive

57 **A TRIFLE FRENCH** ... Ubisoft celebrate their latest game with a fabbo free trip to Paris

73 **D'NA WARRY** ... Cascade are giving away a fantastic ghettoblaster and personal stereos

REGULARS

- 7 NEWS
- 25 ADVENTURE TRAIL
- 29 LLOYD MANGRAM'S FORUM
- 35 ON THE SCREEN
- 36 CECCO'S LOG
- 38 OLDIES UNLIMITED
- 41 NICK ROBERTS'S PLAYING TIPS
- 53 TECH NICHE
- 72 JETMAN
- 75 CHARTS & SCORES
- 89 PBM MAILBOX
- 89 COMMS
- 93 ET AL
- 96 PREVIEWS

ISSUE 62
MARCH ISSUE
ON SALE
FEBRUARY 23

REVIEWS

NEW YEAR SPECIALS SMASHED!

12 LED STORM

Futuristic race game burns rubber on the Spectrum



HOT SHOTS 80% and over . . .

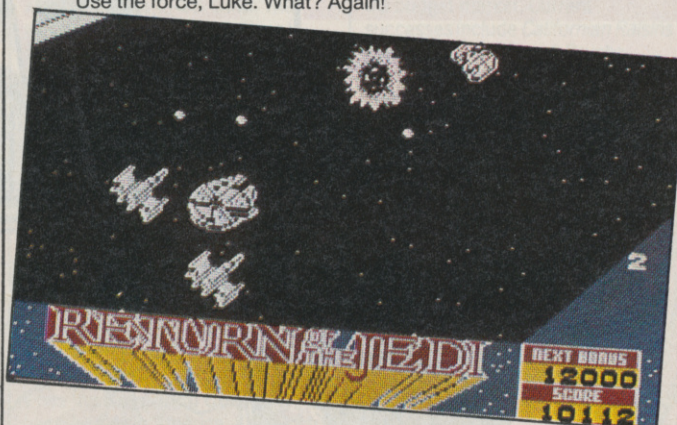
67 BLACKBEARD

Find the map, hic, before Redbeard finds you!



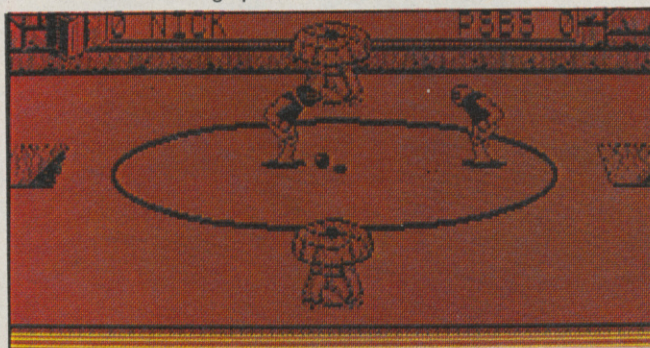
60 RETURN OF THE JEDI

Use the force, Luke. What? Again!



14 SKATEBALL

A teeth-smashing Spectrum debut from Ubisoft



FULL INDEX

58	A Question Of Sport Elite	12	LED Storm GOI/Capcom
66	Blackbeard Kixx 64	66	Lightning Simulator Silverbird
66	Circus Games Tynesoft	66	Motorbike Madness Master-
64	Computer Maniac's 1989	66	tronic
	Diary Leisure Electronic	66	Ninja Massacre Code Masters
	Designs	64	Operation Hormuz Again
66	Double Dragon Melbourne		Again
	House	66	Pro Skateboard Simulator-
62	Echelon US Gold		Code Masters
11	Final Assault Epyx	61	Rambo III Ocean
11	Fire And Forget Titus	60	Return Of The Jedi Domark
18	GI Hero Firebird	18	Ring Wars Cascade
18	Hellfire Attack Martech	58	SDI Activation
66	Hopper Copper Silverbird	14	Skateball Electronic Arts
66	Hundra Mastertronic	66	Star Force Mastertronic
66	International Rugby	11	Techno Cop Gremlin Graphics
	Simulator Code Masters	62	The Munsters Again Again
17	Last Duel US Gold	58	Tiger Road GOI/Capcom
66	Las Vegas Casino Zeppelin		

EDITORIAL 47 Gravel Hill, Ludlow, Shropshire SY8 1QS ☎ 0584 5851/2/3 **Editor:** Dominic Handy **Assistant Editor:** Stuart Wynne **Staff Writers:** Mark Caswell, Philip King, Lloyd Mangram, Nick Roberts **Contributors:** Jon Bates, Raffaele Cecco, Ian Cull, Ian Doggett, Paul Evans, Ian Lacey, Barnaby Page, Ian Phillipson **Editorial Assistants:** Caroline Blake, Vivienne Vickress **PRODUCTION** 1/2 King Street, Ludlow, Shropshire SY8 1AQ ☎ 0584 5851/2/3 **Senior Designer:** Wayne Allen **Designers:** Melvin Fisher, Yvonne Priest **Photography:** Cameron Pound, Michael Parkinson **Production Manager:** Jonathan Rignall **Reprographics Supervisor:** Matthew Uffindell **Production:** Ian Chubb, Robert Hamilton, Robert Millichamp, Tim Morris **Editorial Director:** Roger Kean **Publisher:** Geoff Grimes **Advertisement Director:** Roger Bennett **Advertisement Manager:** Neil Dyson **Sales Executives:** Sarah Chapman, Andrew Smales **Assistants:** Jackie Morris, Lee Watkins ☎ (0584) 4603 **OR** (0584) 5851/2/3 **MAIL ORDER** Carol Kinsey **SUBSCRIPTIONS:** Denise Roberts PO Box 20, Ludlow, Shropshire SY8 1DB Typeset by the Tortoise Shell Press, Ludlow. Colour origination by Scan Studios, St Alban's Place, London N1. Printed in England by Carlisle Web Offset, Newtown Trading Estate, Carlisle, Cumbria CA2 7NR - a member of the BPCC Group. Distribution by COMAG, Tavistock Road, West Drayton, Middlesex.

COMPETITION RULES The Editor's decision is final in all matters relating to adjudication and while we offer prizes in good faith, believing them to be available, if something untoward happens (like a game that has been offered as a prize being scrapped) we reserve the right to substitute prizes of comparable value. We'll do our very best to despatch prizes as soon as possible after the published closing date. Winners names will appear in a later issue of CRASH. No correspondence can be entered into regarding the competitions (unless we've written to you stating that you have won a prize and it doesn't turn up, in which case drop The Sticky Solutions Department a line at the PO Box 10 address). No person who has any relationship, no matter how remote, to anyone who works for either Newsfield or any of the companies offering prizes, may enter one of our competitions. No material may be reproduced in part or in whole without the written consent of the copyright-holders. We cannot undertake to return anything sent into CRASH including written and photographic material, hardware or software - unless it is accompanied by a suitably stamped, addressed envelope. Unsolicited written or photographic material is welcome, and if used in the magazine is paid for at our current rates.



© Crash Ltd. 1989

NEWSFIELD
A NEWSFIELD PUBLICATION

ABC

ISSN 0954-8661

COVER DESIGN & ILLUSTRATION BY OLIVER FRIEY

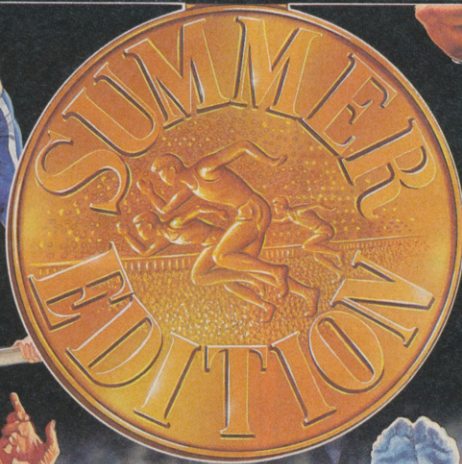
The ambitions of athletes from all corners of the Earth culminate in these championships. For it is here that the cream of the World's sporting elite have gathered for a once in a lifetime opportunity to compete for the most coveted titles known to man.

Now Epyx offers you the chance to compete with the World's best

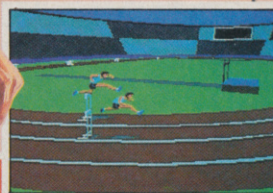
THE EPIX GAMES™

in eight disciplines that will test your courage and prowess to the absolute limit!

You must be graceful and quick. You'll require deadly accuracy and nerves of steel. You'll need strength, stamina, artistic, and physical skills. And above all else you'll need the will and determination to be a winner!



CBM64



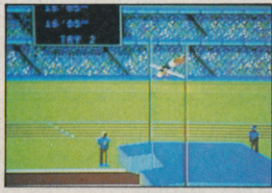
IBM PC



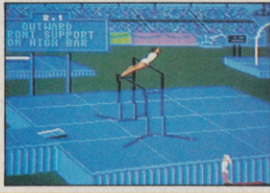
IBM PC

Epyx®

1988 Epyx Inc. All rights reserved. Epyx is a registered trademark No. 1195270. Screens from CBM64 and IBM PC versions. Graphics may vary on other computers. Manufactured and distributed under licence from Epyx Inc. by U.S. Gold Limited, 2/3 Holford Way, Holford, Birmingham B6 7AX.



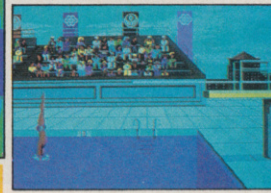
CBM64



CBM64



IBM PC



IBM PC



CBM64

- Eight testing events
- Open & Closing Ceremonies
- Multiple player option or compete against the computer

The quest for gold has begun. Eight thrilling and testing events stand between you and the pinnacle of sporting fame! On the track combine speed, strength and rhythm in the explosive **HURDLES**. Now engage in a spectacular test of sheer human power as you compete for the longest distance in the **HAMMER THROW**. Then reach for the sky in the **POLE VAULT**. Stretch to clear that near impossible bar!

Catch your breath. We're off to the Gymnastics hall and the **RINGS**. A unique discipline in which supreme control and strength are paramount. And then there's the spectacular **UNEVEN PARALLEL BARS**, the blue riband event.

VELODROME SPRINT CYCLING will see you locked in a tough physical and psychological battle. And then perhaps the most nerve jangling event of all — **SPRINGBOARD DIVING**. You'll really need to psych yourself up for this one!

Finally **ARCHERY**. Cool. Your eye must be accurate and your arm steady. Will yours see you through to yet another medal?



Available now for:
CBM64/128 • IBM PC & Compatibles

Available soon for:
Amstrad CPC • Amiga • Atari ST • Spectrum 48/128k, +2, +3

NEWS

SAM: CLIVE II

MGT, THE leading manufacturer of Spectrum add-ons, has unveiled detailed plans for the production of a £149.95 'Super 8-bit' computer **Miles Gordon Technology's** SAM Coupé features 256K RAM, six-channel stereo sound, four screen display modes, a sophisticated custom chip and a Z80B processor which runs 50% faster than the Spectrum's. A £220 version comes with a built-in 780K 3.5" disk drive, but the entry-level machine will load off cassette. There is also a 48K Spectrum emulation mode allowing

most Spectrum games to run on it. Expected to be available from April, already the first month's production run has been over-subscribed.

News of the machine was exclusively revealed in Issue 48, with an in-depth report in Issue 50, but it's taken a year to finalize the design. SAM will come complete with a multiplicity of interfaces, including MIDI for musicians, and can easily be expanded to 512K RAM with two extra chips. Owners of MGT's Plus D and DISCIPLE Spectrum disk drive add-on will also be pleased to know they're SAM compatible. For more details on this exciting machine turn to page 54.

DISHY NEW SPECTRUM IN SEX SCANDAL

THE NEW version of the Spectrum +2, the +2A, has run into criticism due to its incompatibility with some peripherals. This is because it has the same circuit board as the +3, which has a slightly different edge connector to the old +2. Critics suggest **Amstrad** have made this alteration to clear stocks of unused +3 boards.

Although the +2A is easily distinguished from the grey +2 by its black colour, it is being sold in identical packaging.

The Spectrum's creator has, of course, moved onto other things. Sir Clive Sinclair's latest product is a low-price satellite TV receiver. The flat, square 'dish', from Sir Clive's **Cambridge Computer** firm, measures just 60cm across. And at a mere £149.95 for the basic receiver and tuner system (£179.95 with remote control; £229.95 with remote control, graphic equaliser and stereo sound), it will be in direct competition with Alan Sugar's similarly-sized (and shaped)

Amstrad/Fidelity dish at £199.99 (£259.99 with remote control). We're all backing Sir Clive's!

Both dishes, available in high street stores from March, use the popular PAL format to receive transmissions, including the 16 channels available from the recently-launched *Astra* satellite.

Of course one of the main worries with satellite TV is the potential for crude exploitation-type entertainment. Similar concern about standards in computing are being voiced by **OASIS** – the Organisation Against Sexism In Software. It aims to encourage software houses to avoid sexist stereotyping and is producing a bi-monthly journal, offering a forum for further discussion on the subject.

One software house already producing software with 'women in mind' is Audiogenic, which has outlawed sexism and adopted a policy of positive discrimination towards women – surely that's a contradiction in terms.

MOONWALKER STRIKES GOLD

MEGASTAR Michael Jackson is set to appear on the Spectrum this autumn thanks to **US Gold**. The game will be based on the pop phenomena's hit *Moonwalker* movie, which opened this last Christmas. In the film Jackson is turned into a superhero by a passing shooting star. While critics have lambasted the plot, which includes lengthy clips of his videos, the effects are spectacular with Jackson transforming into a rocket car, a silver robot and even a massive spaceship.

The game will be programmed by US Gold and distributed by them in Britain and Europe (more than likely containing a free audio track too!), while the **Keypunch Corp** will handle sales in America. Keypunch are based in Minneapolis, St Paul,

and as well as having several full-priced labels account for 25% of the US budget market. Current successes include *Californian Raisins* (based on a TV ad) and *Psycho*. Keypunch also plan to release *Jaws* and *A Nightmare On Elm Street*. US Gold will be handling the UK distribution of some Keypunch games, including *A Nightmare On Elm Street*.

Another big licence due out from US Gold is *Indiana Jones: The Last Crusade*. US Gold have produced computer game versions of the earlier two films and expect the third to be 'wonderful'. Programming is by **Tiertex**, responsible for *720°* and *Thunder Blade* and also tipped to do *Moonwalker*. *The Last Crusade* is due out in June.



FOLLOW THAT LICENCE!

AFTER MANY months toting the game around software houses, it seems that the ever-cute **Roger Rabbit** has found a home.

Activision have just finalised plans to release *Who Framed Roger Rabbit*, due out in February. The conversion of the Robert Zemeckis (*Back To The Future*) film is to be programmed by Software Studios (*R-Type*). Other interesting releases from Activision include *The Real Ghostbusters* (February), *Time Scanner* (March) and *Incredible Shrinking Sphere*. **Force Field** are programming the last two, with *ISS* reviewed next issue.

Ocean are never quiet. Schwarzenegger's *Red Heat* and TV's *Run The Gauntlet* are ready for an Easter release. *Renegade* fans will be glad to hear the third in the series is also planned. Ring the *CRASH Hotline* (page 22) for more up-to-date info.



The new Atari Games Cent

It's what every computer games player has been waiting for. Hundreds of brain-boiling software titles that'll push your skill and judgement to the limit. All under one roof. When it comes to packing hardware, Rambo's got nothing on us. Everything from the



Centres have hit town.

stunning Atari VCS to the mindblowing Atari XE Games System.
So get down to your local Atari Games
Centre. They're smashing.

ATARI

OFFICIAL ATARI Games Centres

NORTH

Cheshire
Toys 'R' Us Ltd. Gt. Portwood St. Peel Centre, Trading Park, Stockport
610 Europa Boulevard, Westbrook, Warrington
Toy & Hobby 48 Foregate St., Chester
12-16 Princes St., Stockport
A.S. Wooton 160 Eddleston Rd., Crewe

Cleveland
Chips Computer Shop Clark's Yard, Darlington
Multi Coloured Micros in Shops, Dundas Arcade, Cleveland

Greater Manchester
Toy & Hobby 16 Spring Gardens, Manchester
Unit 1, Bryan House, Standishgate, Wigan
Unit 33, Town Square Shopping Centre, Ashcroft St., Oldham

Humber-side
Tomorrow's World 27 Paragon St., Hull

Lancashire
Viu Data Software 271a Old Street, Ashton-under-Lyme
Toy & Hobby Lowthian House, Market St., Preston
Ladbroke Computers 33 Ormskirk Rd., Preston

Merseyside
Toy & Hobby 230-240 Grange Rd., Birkenhead
The Hardshaw Centre, Church St., St. Helens
Microsnip 37 Seaview Rd., Wallasey

North Yorkshire
Computer Store 29 Parliament St., York
York Computers 8 Davygate Arcade, York

South Yorkshire
Computer Store 21a Printing Office St., Doncaster

West Yorkshire
Computer Store 13 Westmoreland St., Wakefield
10 Square, The Wool Shops, Halifax
42 Trinity St. Arcade, Bond Street Centre, Leeds
34-36 Kygate, Bradford
4 Market Place, Huddersfield

White Rose Computers Bradford Rd., Cleckheaton

Tyne & Wear
Toys 'R' Us Ltd. 1 Cameron Park, Metro Centre, Gateshead
Computer Shop 7 High Friar, Eldon Square, Newcastle
Maughan Micros 93 The Galaria, Metro Centre, Gateshead

SOUTH

Avon
Toys 'R' Us Ltd. Centaurus Rd., Patchway, Bristol

Bedford
Software Plus Unit 11, The Boulevard, Harpur Centre, Bedford

Cambridge
Software Plus 43 Burleigh St., Cambridge
Logic Sales Unit 6, Midgate, Peterborough
Toys 'R' Us Ltd. Bourges Boulevard, Peterborough

Devon
Computerbase 21 Market Avenue, Plymouth
Software Express 9 Exeter St., The Viaduct, Plymouth

East Sussex
Gamer 71 East St., Brighton

Essex
Toys 'R' Us Ltd. Southernhay, Basildon
Software Plus 15 Kingsway, Colchester
Liberty Shopping Hall, Basildon
Unit 1, 28-31 Moulsham St., Chelmsford
Unit 1, Queensgate Centre, Grays
236 Chartwell Sq., Southend

Hampshire
Computachoice Unit 5, 122-124 London Rd., Northend, Portsmouth

Electronequip 59 West St., Fareham

Toys 'R' Us Ltd. Western Esplanade, Southampton

Software Plus Unit 8, The Boulevard, Wellington Centre, Aldershot

Hertford
Toys 'R' Us Ltd. Roaring Meg, London Rd., Stevenage
Software Plus Unit 94, In Shops, St Albans
13 Town Centre, Stevenage

Kent
Arco Marketing 4 Westgate House, Spital Street, Dartford
Village House of Computers 87 Beckenham Lane, Shortlands, Bromley

Computer Leisure Centre 117 High Street, Orpington

Toys 'R' Us Ltd. Horstead Retail Park, Maidstone Rd., Chatham

Silica Shop 1-4 The Mews, Hasslerly Rd., Sidcup

Software Plus Unit 2, 4-8 Orange St., Canterbury
25 High St., Gravesend

Oxford
Soft Spot 5 George St., Banbury

Suffolk
Software Plus 22 St. Matthews St., Ipswich

Surrey
Toys 'R' Us Ltd. Church St. West, Woking

Wiltshire
Trowbridge Computers Unit 11-12, White Hays South, West Wilts Trading Estate, Westbury

LONDON

Logic Sales 19 The Broadway, The Bourne, Southgate
Toys 'R' Us Ltd. 78-80 High Rd., Wood Green
Till Rd. NW2

Silica Shop Inside Selfridges, Oxford St.
Lion House, Tottenham Court Rd.

Hamleys Regent St.

Software Plus In Shops, 37-43 South Mall, Edmoniton Green

MIDLANDS

Northampton
Toys 'R' Us Ltd. Towcester Rd., Northampton

Stafford
Toys 'R' Us Ltd. Festival Park, Stoke-on-Trent
Miles Better Software 219-221 Cannock Rd., Chadswood, Cannock

West Midlands
Toys 'R' Us Ltd. 31 Dale End, Birmingham
Wolverhampton Rd., Oldbury, Warley

Computerwise 10 Wiseman Grove, New Oscott, Sutton Coldfield

Mr. Disk 12, Three Shires Oak Rd., Bearwood, Warley

Greens Pharma Hold 22 Market Way, Coventry

Software Express 212-213 Broad St., Birmingham

Warwick
Spa Computer Centre 68 Clarendon St., Leamington Spa

SCOTLAND

Grampian
RMS 75 Rosemond Viaduct, Aberdeen

Highland
Inverness Computer Centre 15 Market Arcade, Inverness

Lothian
Grafix 14 West Main St., Whitburn
Capital Computers 12 Home St., Edinburgh

Strathclyde
Megabyte 12 Elterick Square, Town Centre, Cumbernauld
John's Computers 4 Graham St., Airdrie
Microshop 271 Dunbarton Rd., St. Patrick, Glasgow

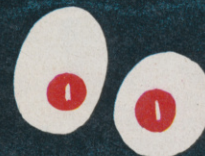
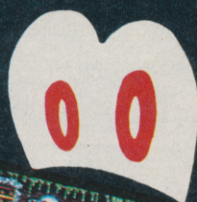
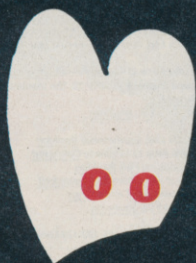
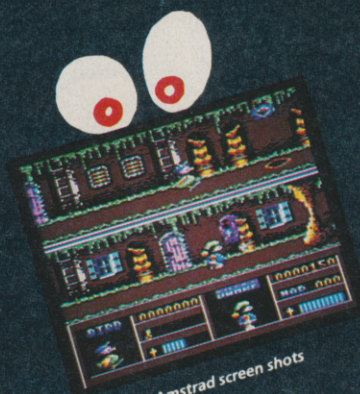
WALES

South Glamorgan
Eagle Business 48 Charles St., Cardiff
Toys 'R' Us Ltd. Hayes Bridge Rd., Cardiff

West Glamorgan
Toys 'R' Us Ltd. Parc Tawe, North Dock, Swansea

Gwent
Ni Fi Western 52 Cambrian Way, Newport

DON'T GET
LEFT IN
THE DARK...



Spectrum cassette £7.99

Commodore 64 cassette £9.99, disc £12.99

Amstrad cassette £8.99, disc £14.99

For mail order please send your order and remittance (cheques payable to British Telecom plc or direct debit from Access/Visa card by stating card number and expiry date) to: The Marketing Department, Telecomsoft, First Floor, 64-76 New Oxford Street, London WC1A 1PS.



Telecomsoft, First Floor, 64-76 New Oxford St, London WC1A 1PS.
Firebird and Firebird Logo are trademarks of British Telecommunications PLC.

**DYNAMIC
DUO**



A LEGEND IN GAMES SOFTWARE



● Driving away the criminal element

Producer **Gremlin Graphics**
Gas 'n' bullets £7.99 cass
£12.99 disk
Author **Tony Porter, Gary Priest, Jon Harrison, Kevin Bulmer**

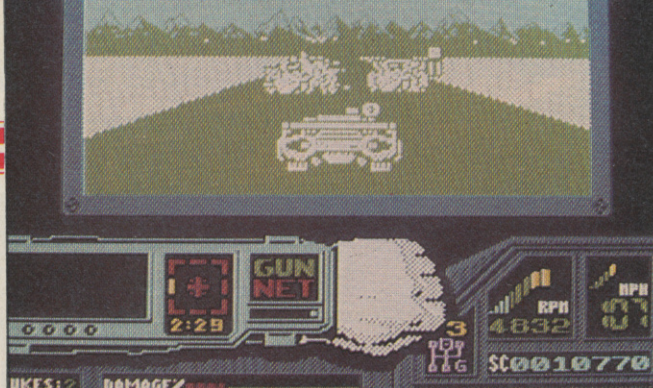
In the future, street crime and WWII seem indistinguishable.

You begin the game in your Vmax Turbo Interceptor with hordes of DOA cars trying to force you off the road. You

respond by blasting them to pieces, but the *real* work begins when you get called to crime

Overlander crossed with **RoboCop** and no multiloop sounds a promising concept, and the first car stage is certainly very smoothly programmed. But there's a chronic lack of both colour and long-term appeal – later levels neglect even to change the monochromatic colour of buildings. Disappointing.

STUART 59%



▲ With colours like this who wants to play the game?

scenes. Once you arrive the game switches to a side-on view of you walking through an apartment block. Gunning down

to start with, but offers little originality to keep you playing for long.

MARK 51%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: the road scrolls fairly smoothly, but the buildings are dull and monochromatic

Sound: a noisy 128K title tune and some quiet in-game engine noises and footsteps

Options: definable keys

General rating: *Techno Cop* tries to mix two very different genres, but as neither section is very riveting, it fails to hold your attention for very long

criminals earns extra points, but watch out for civilians.

The driving blast-'em-up section has been done to death recently and *Techno Cop* is one of the weaker, more repetitive versions. The other section is no better, simply being a case of remembering where you found the criminal last time. *Techno Cop* is mildly addictive, at least

Presentation	64%
Graphics	64%
Sound	52%
Playability	58%
Addictive qualities	55%

OVERALL 56%



● The only way is up

Producer **Epyx**
How steep £8.99 cass
£12.99 disk
Author **Choice Software**

Cold? Pah! You call a few snowflakes on New Year's Day bad weather? Well, crawl back into bed with your hot water bottle because you certainly won't like this...

Final Assault begins by asking you to pack your bags. Along with pitons and ropes you can choose to take a pizza (honest) and various other items. Once kitted out you can choose one of six routes, two of each difficulty level. Climbs consist of both ice and rock faces, as well as crossing dangerous glaciers.

Ice faces are climbed with pickaxes, using a simple

combination of up, down and fire. Rock faces require far more skill as all the limbs are controlled individually: the player moves them in turn, trying

to find the best holds. Four icons show whether each limb has a firm hold, a weak hold, or none at all.

Once on the glacier you simply walk along, poking at thin bits of ice to test them – it's very easy.

adequately represented. Ultimately this is a mixture of sections which don't quite gel into a complete game – a brave attempt at a sport inherently difficult to implement.

PHIL 45%

Final Assault is certainly an appropriate name because your first game will doubtlessly be your last. It has no addictive qualities at all, due to monotonous gameplay and pathetic graphics. Admittedly there's an element of strategy in picking your stores, but mostly it's just sticking a pick into the ice and hauling yourself up.

NICK 31%

In fact the only section where much skill is needed is on the rock face. Graphically, the climber and the mountains are



▲ ... And who wouldn't be 2624 metres up a vertical ice face

THE ESSENTIALS

Joysticks: Cursor, Sinclair

Graphics: the climber is fairly well animated, but simple mountain slopes are dull

Sound: a catchy little title tune but only a few beeps during play

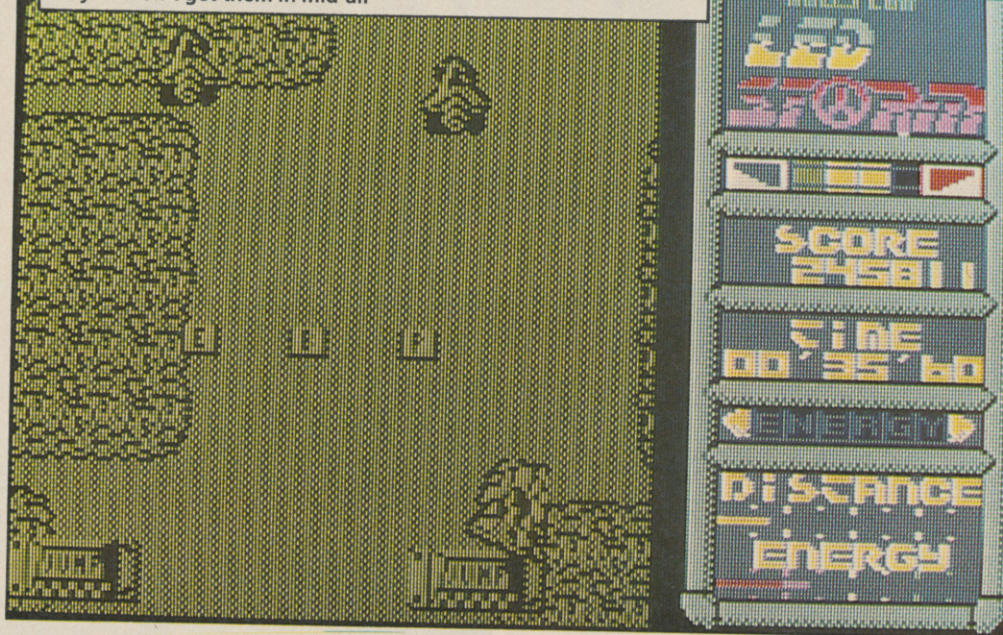
Options: definable keys. Choice of six routes to climb

General rating: your money would be better spent on a woolly hat and a pair of wellies!

Presentation	50%
Graphics	38%
Sound	47%
Playability	40%
Addictive qualities	35%

OVERALL 38%

► 'E' is for energy, 'B' is for a battering ram and 'P' is for points—but you won't get them in mid-air



WEATHERING THE STORM

- In Netwood City, keep to the clear parts of the track to go faster.
- Collect the letter 'B', then ram all the other cars.
- Hit the ramps before gaps at full speed, or you'll fall short of the other side.
- In Coral Sea, if your car is flashing, you can destroy the coral monsters on contact.
- If you get stuck behind some rocks in Netwood City, just jump to get over them.
- Keep a look out for fuel cans: if six are collected, your energy returns to its maximum level.

Producer **GOI/Capcom**
Led in petrol **£8.99** cass
£12.99 disk

Author **Mike Follin**, graphics
by **John Tatlock**, music
by **Timothy Follin** (Soft-
ware Creations)

In a future time, traffic congestion has got so bad that special 'skyways' have been built. But although they're free from stupid pedestrians, there's more than enough kamikaze drivers (no bears, though) (thank goodness! – Ed) to make life interesting.

Nine vertically-scrolling tracks range from the high flyovers of the Capital City to the uninviting landscape of

NICK GOI/Capcom have done an excellent job with a detailed scrolling landscape and sprites that, although monochrome, are very effective. You'll need good reflexes to be able to survive even the first level, which makes it extremely addictive. The soundtrack that accompanies the split-second action is excellent with a host of arcade-type effects and a selection of tunes that grip your attention and add atmosphere to the game. The basic idea behind the *LED Storm* is very similar to the classic *Spy Hunter*, but instead of using weapons you can jump over your enemies and shake off passengers. I'm sure that *LED Storm* will be a hit with everyone, and it certainly deserves to be.

91%

Ruins Desert. Contact with small cars and other obstacles slows you down and reduces your energy level. Some of the tracks also contain huge gaps which can only be cleared by hitting a ramp at full speed.

Although your turbo-charged car is completely unarmed, it does have one useful trick up its sleeve: it can perform huge upward leaps to avoid other cars, and can even crush them as it lands. But beware the pesky frogs which hang on the back of the car, stopping it from jumping: they must be shaken off by quickly moving left and right.

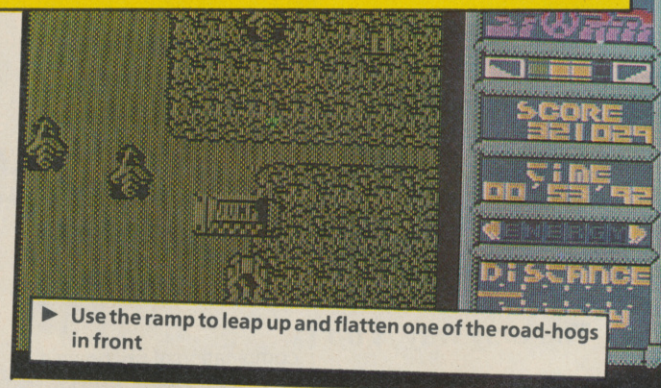
Each of the nine stages must be completed before your energy level reaches zero. Fortunately, extra energy can be gained by driving through fuel cans and energy tablets. The latter are either static, floating around the track or flying (in which case the car must jump to get them). Small bonus letters may also be collected for extra points and even a battering ram to allow you to destroy other cars on contact.

Falling into gaps or fatal car smashes do not, strangely, mean the end of the game. Instead a new car is brought onto the track by a large, hovering spaceship at the cost of much vital energy.

What really makes *LED Storm* so superior to other driving games is its exhilarating speed: it must be one of the fastest games on the Spectrum. The super-fast, and smooth, vertical scrolling is stunning, and the effect of speed is cleverly enhanced by

From the programming team who brought you *Bionic Commando* comes a nine level, rip-roaring, nail-biting racing game. Initially you may, like me, puzzle at the lack of offensive weapons to blast all the unfriendly road hogs. But once you get into the game the sheer thrill of racing down the track, at a vast rate of knots, pushes all thoughts of blowing up motorway monsters from your mind. Besides, who needs poncey machine guns and rocket launchers when you can leap and flatten the dudes. If you think you can stand the pace buy *LED Storm* now!

MARK 92%



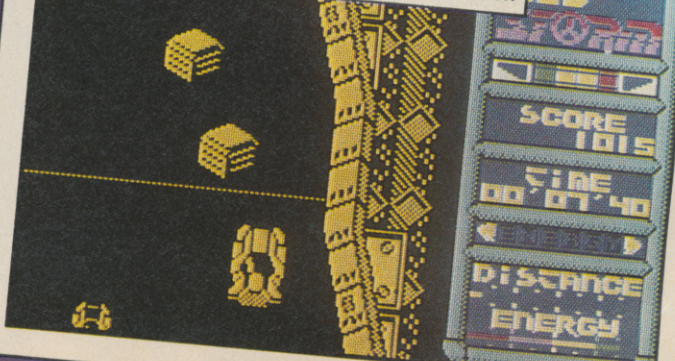
► Use the ramp to leap up and flatten one of the road-hogs in front

the horizontal marks on the track. Furthermore, the various vehicles are all well-drawn, especially the extra-large juggernauts. One minor flaw is the horizontal

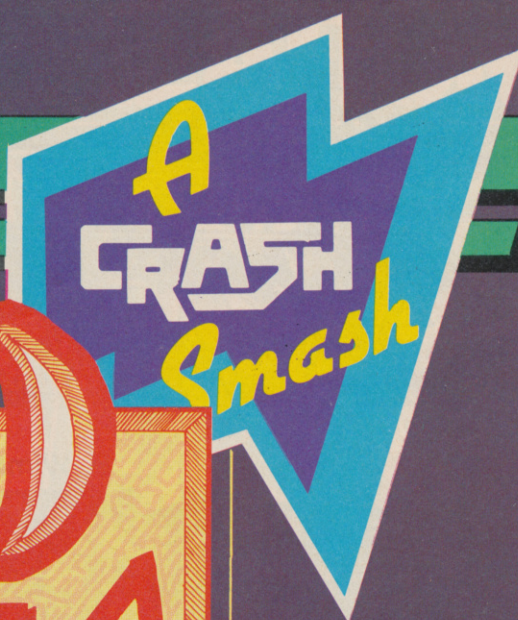
movement of the screen which is stepped instead of smoothly scrolling, but it doesn't affect play anyway.

Sound is also used well: brilliant 128K tunes accompany both the title

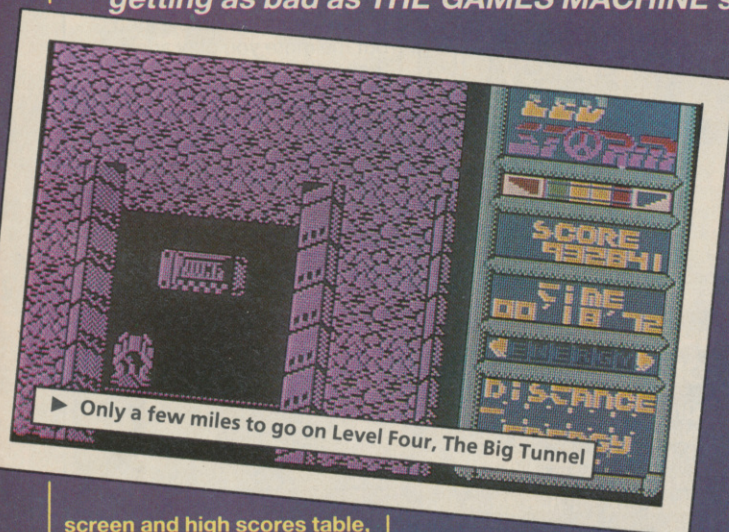
► Just off the starting line and about to crash



LED STORM



- Spring showers bring heavy weather (eh? these comments are getting as bad as *THE GAMES MACHINE's* – Ed)



► Only a few miles to go on Level Four, The Big Tunnel

screen and high scores table, while the furious driving action features a variety of excellent effects. 48K owners aren't too badly off either, although there is a multiloop with two levels being loaded at a time.

As a fan of that golden oldie, *Spy Hunter*, when I first set

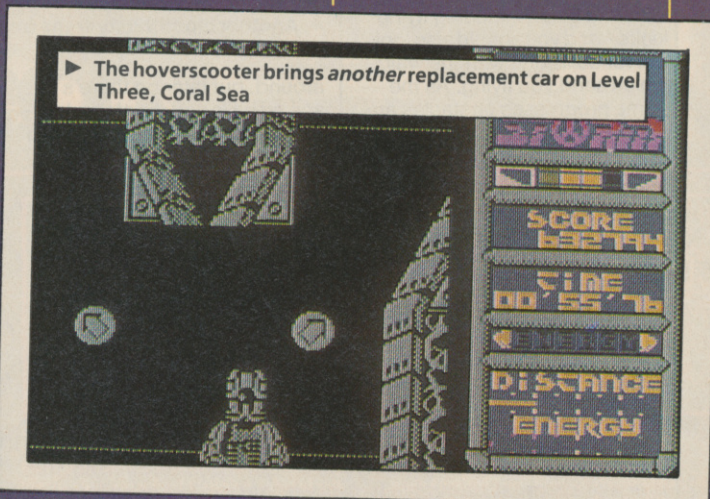
eyes on *LED Storm* my eyes popped out. And playing it proves an even more amazing experience – genuine skill is required to make progress, rather than the repetitive blasting featured in other

recent driving games. Excellent game design and superb presentation go together to produce one of the most playable games for a

long time.

Even so, I wondered if the simple idea of jumping and zooming along the highway would eventually get boring, but the opposite is true: the more I played, the harder it was to tear myself away from such a compulsive game. If the soon-to-be-released coin-op is anywhere near as enjoyable, it's sure to be the arcade hit of 1989. And just remember, you saw it first on the Spectrum!

PHIL 95%



► The hoverscooter brings another replacement car on Level Three, Coral Sea

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: very fast vertical scrolling of the monochromatic track

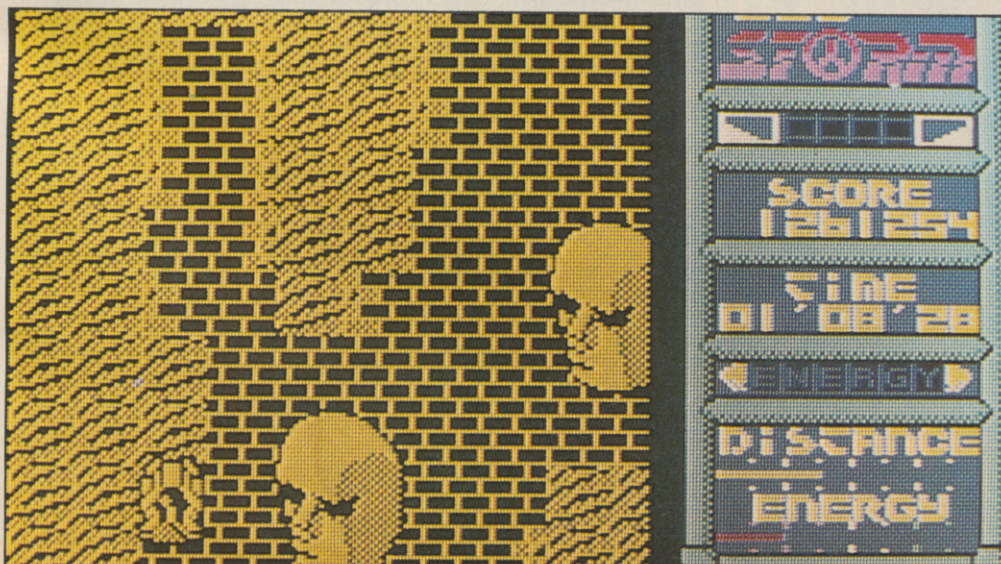
Sound: excellent 128K tunes and neat in-game effects, including a nice metallic 'thump' sound when the car lands

Options: definable keys

General rating: a beautifully-presented driving game that plays as good as it looks

Presentation	92%
Graphics	90%
Sound	91%
Playability	93%
Addictive qualities	92%

OVERALL 93%



SKATEBALL

● Wimbledon FC 2020

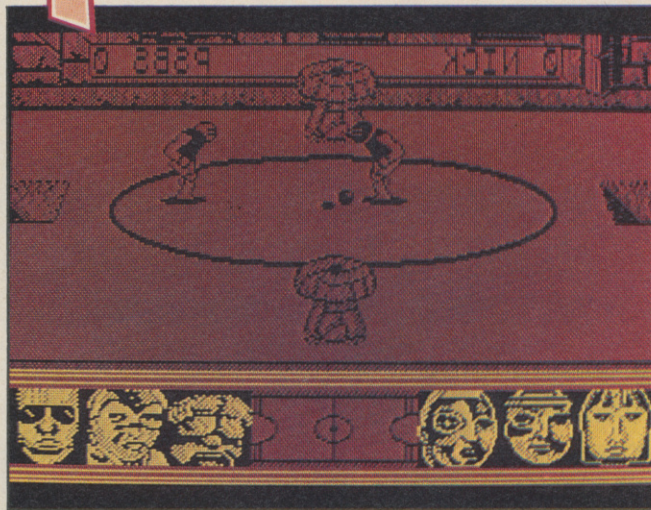
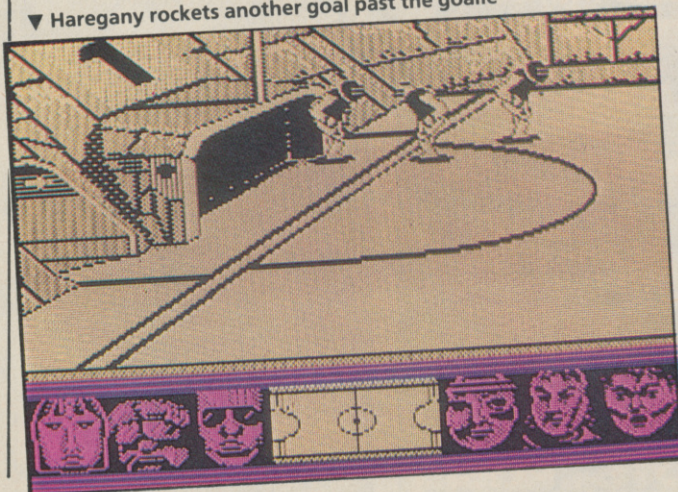
Producer Electronic Arts/Ubi Soft
Shoulder pads £8.99 cass
£14.99 disk
Authors John Medhurst, Roger Taylor, Nigel Kenward

Imagine Torville and Dean crossed with the movie *Rollerball* and you've got a good picture of the next century's most popular sport. The game has two players per side, a goalie and an attacker, plus two substitutes each. Goals are scored by bouncing the puck past the goalie, and each round lasts until one player has scored five points. Tackling is in the time honoured Wimbledon fashion – anything goes, including flying kicks – and you should also look out for collisions with the wall, which send you flying. As the game progresses obstacles are added: initially just blocks to run

PHIL This is essentially a futuristic version of ice hockey, but with even more violence. Great satisfaction can be gained from tripping your opponent, especially when he then falls into a pit. It's surprising that there's only one player to control (apart from the goalie), but this avoids control confusion and their different characteristics bring in a strategy element. It also enables a stronger player to be handicapped via weak players. The action in a two-player game is always fast, end-to-end stuff. It's a pity that on higher rounds you can simply kill off all your players, and, if more than three points in the lead, win. A bigger penalty for losing a player would add to the fun, but another flaw – the cumulative goal score is only displayed at the end – compensates since you're never certain of your score unless you carefully note down end of round points. Even so, this is one of the most enjoyable two-player games I've seen for a fair while, although it's not so hot playing against the computer.

85%

▼ Haregany rockets another goal past the goalie



▲ Another bloodthirsty scene from Ubi Soft's *Rollerball*-style sports game

around, but later on there's pits, spiked balls and disintegrators – fall foul of these and your man is

dead. Lose all your men and the game's over. To avoid these obstacles when your man is

offscreen you can use the effective radar scanner.

There's more to the game than simple violence, however, since each of your players (apart from the goalie) has different characteristics. These include strength, balance, reactions and shooting skills. Choosing the right players at the start of the game is vital for success.

They say that life in the future will be tough, *Skateball* goes some way to showing us just how tough. To start off with the game seems uncomplicated, but the more you play against a friend, the more demanding it becomes. Background graphics are nicely detailed, although moving sprites and sound effects both leave a little to be desired. Nevertheless *Skateball* is a fast, violent and addictive sports game which is well worth considering.

MARK 80%

SKATING ON THIN ICE

- On early levels, stronger players tend to do best.
- If the opposing player is stronger, don't tackle him head-on: hit him from the side.
- Walk the ball straight through the goalie for a certain goal.
- When defending your goalmouth try and shoot the puck away – usually it goes straight to the other end.

At first I thought this an overly simple, run-for-the-goal-and-fire game, but after a closer look, my opinion soon changed. Picking a player for shooting skills matters little if a stronger player, or one with faster reactions, keeps bouncing you off the ball. With a stronger player the game becomes fairer – I started winning – and more enjoyable. The first levels are great fun on their own, and when the pits and spikes turn up it becomes both harder and side-splittingly funny!

STUART 90%

THE ESSENTIALS

Joysticks: Kempston, Sinclair

Graphics: adequate, good detailing on background

Sound: no tunes, but decent in-game bumping and barging effects

Options: One- or two-player games, change the monochromatic background colour, practise one of the nine levels and change team names.

General rating: one of the best two-player games around at the moment.

Presentation	76%
Graphics	79%
Sound	55%
Playability	85%
Addictive qualities	86%

OVERALL 85%

The CRUCIAL COMPILATION



LAST NINJA
REPLACES
CRAZY CARS ON
THE COMMODORE

THE IN CROWD

ocean



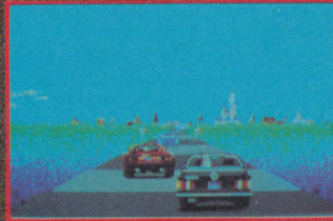
GRYZOR Featuring all the game-play of the arcade original, Gryzor takes you into a thrilling alien world of force fields, fanatical guerillas and strange enemy defence systems – but you have the fire-power and maybe, with a 'little' skill, grit and split second timing, you can infiltrate the aliens' headquarters. Play Gryzor once and you'll be hooked!

© 1987 Konami



BARBARIAN THE STORY SO FAR... The evil sorcerer Drax has agreed that if a champion can be found who is able to defeat his demonic guardians, the Princess Mariana will be released. From the wastelands comes an unknown barbarian, a mighty warrior, wielding his broadsword with deadly skill. Can he vanquish the forces of Darkness? ONLY YOU CAN SAY...

© Palace Software Ltd



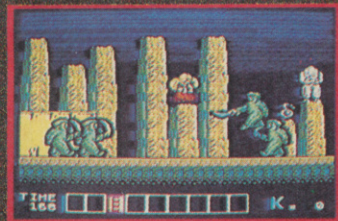
CRAZY CARS You are racing in the world's craziest race: "The American Cross Country Prestige Cars Race". If you are able to complete the race before the time runs out, you will get a faster car. You start with a Mercedes 560 SEC, and only the world's best drivers may drive a Ferrari GTO. PREPARE TO START, READY? GO!!!

© Titus Software Ltd.
LAST NINJA replaces CARS on C64



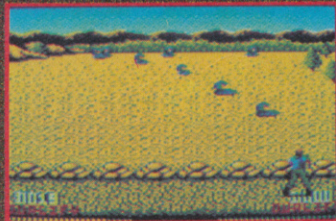
PREDATOR You've heard about Predator, the Schwarzenegger movie – now you can play the leading role. Take a crack commando unit into the South American jungle to rescue a bunch of trapped diplomats. Should be easy enough...and so it would be, if it weren't for the mysterious alien who keeps on taking out your men.

© 1987 Twentieth Century-Fox Film Corp. All rights reserved.



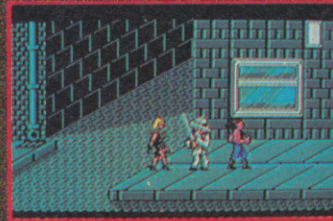
KARNOV Join Karnov, the fire-breathing Russian stoneman, on his hazardous quest to defeat the evil dragon Ryu and find the Lost Treasure of Babylon. Karnov is a vast 4-way scrolling game that combines both strategy and fast action in nine challenging levels of gameplay. It is recognised by arcade addicts everywhere as one of the best games of its kind. Karnov also has something special in the way of characters – have you ever been killed by a skeleton on an ostrich?

© Electric Dreams Software Ltd



COMBAT SCHOOL Konami's arcade hit now for your home micro and already a No. 1 hit. Seven gruelling events featuring the Assault Course, Firing Range, Arm Wrestling and Combat with the instructor himself! Combat school throws down the challenge to the toughest of thoroughbred gamers.

© 1987 Konami



TARGET: RENEGADE Every move you make, every step you take, they're watching you. Fight your way through the precinct – the back alleys, the car parks, fight your way through the villainous community, the skin-heads, the Beastie Boys, the bouncers. This is just the tip of the iceberg on your chilling quest to confront "MR. BIG".



PLATOON Lead your Platoon deep into enemy territory, you can almost feel the humidity, sense the threatening dangers as you encounter the enemy and his many booby traps. Having found the underground maze of tunnels, enter at your peril! Enemy soldiers lunge at you from the murky waters within, but this is the only way you can find vital information: If you come out of this alive, you'll be just one of the few!

© 1986 Hemdale Film Corporation. All Rights Reserved.



SPECTRUM
AMSTRAD
COMMODORE

CASSETTE
£14.95

Ocean Software Limited · 6 Central Street · Manchester · M2 5NS · Telephone 061 832 6633 · Telex 669977 OCEANS G

The best deal for Spectrum Artists bar none

**"THE BEST SPECTRUM ARTIST
PROGRAM BAR NONE"**

SINCLAIR USER
CLASSIC,
NOVEMBER 1986



**FULL PACKAGE
INCLUDING ARTIST II
AND MOUSE SYSTEM
ONLY £49.99**



**KEMPSTON
COMPATIBLE
JOYSTICK AND
MOUSE
INTERFACE**

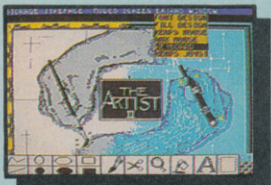


TOP QUALITY MOUSE

The Artist II is an all new graphics package following in the footsteps of its extremely successful predecessor, the Artist. A host of powerful new features includes:-

- SUPERB QUALITY MULTI-FEATURE ● PULL DOWN MENUS
- WINDOWS ICON DRIVEN ● FONT AND SPRITE DESIGNER ● ZOOM MODE
- FLEXIBLE CUT AND PASTE ● ABLE TO SUPPORT MANY PRINTERS.

To complete the package, the Artist II also comes with a top quality mouse system and Kempston compatible joystick and mouse interface. Take advantage of this special offer, then just plug in and go!!



ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BYPHONE

0782 744707
24 hr Credit Card Line

BYPOST

Send cheques/PO's made
payable to 'Datel Electronics'

UK ORDERS POST FREE

EUROPE ADD £1.00 OVERSEAS ADD \$3
FAX 0782 744292

DATTEL ELECTRONICS

DATTEL ELECTRONICS LTD, FENTON INDUSTRIAL ESTATE,
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND

SALES ONLY
0782 744707

TECHNICAL ONLY
0782 744324



FREE OFFER!
ORDER YOUR ARTIST II PACKAGE
NOW AND WE'LL SEND YOU A FREE
MOUSE MAT AND MOUSE HOLDER
(WHILE STOCKS LAST).
USUAL RETAIL PRICE £12.99

PLEASE STATE
48/+2/+3 WHEN ORDERING

LAST DUEL

● Devastating duellist duo

Producer **Capcom/GO!**
Spare wheels **£8.99 cass**
£12.99 disk
Author **Tiertex**

According to the King, Princess Sheeta has been kidnapped by baddies from the evil planet of Mu. While you may suspect she's run off to change her name to something bearable like Ingrid or Beatrice, you've still got to try and rescue her.

Your rescue attempt takes the form of six distinct levels (multiloaded one at a time) of vertically-scrolling blasting. Your vehicle changes after each level, alternating between a Reliant Robin lookalike and a spaceplane. In the simultaneous two-player mode, one player controls the car while the other gets the spaceplane. The main difference between them is the way the car must jump over holes in the play area, whereas the spaceplane just hovers. Extra firepower for both can be gained by collecting floating symbols. This is useful for the

CHOOSE YOUR WEAPONS

- Keep jumping and firing on Level One – you'll easily get to the end.
- Make sure that you collect the power symbols at the start of the second level: you'll really need them later.
- On Level Two, position the spaceplane between four of the worm holes and the worms will not touch you.
- When in the car, your best chance of defeating the large aliens is to continuously jump and shoot.

When US Gold's *GO!* brought out 1943 I thought they'd forgotten how to produce a decent vertically-scrolling action game. With Gold's *LED Storm* (Smashed on page 12) out this month I was forced to eat my words – *Last Duel* has shoved them even further down my throat. Tiertex (*Thunder Blade*) have produced some slick presentation combined with some impressive graphics (albeit a bit jerky at times) to form another addictive shoot-'em-up. The frequent appearances of the Princess add that extra bit of addiction. It may not be as good as *LED Storm*, but at least you can shoot things!

PAUL 75%

huge alien which must be defeated at the end of each level – after which the Princess

appears again, with more desperate cries for help. The monochromatic vertical

MARK *Last Duel* is terribly frustrating. But when eventually mastered the game reveals itself to contain more luck than judgement. And unlike say *LED Storm* I never had the feeling there was a good game underneath worth persistence. It's also very difficult to see what's happening on later stages, with lots of bullets swirling over a repulsive purple background. Disappointing. 62%

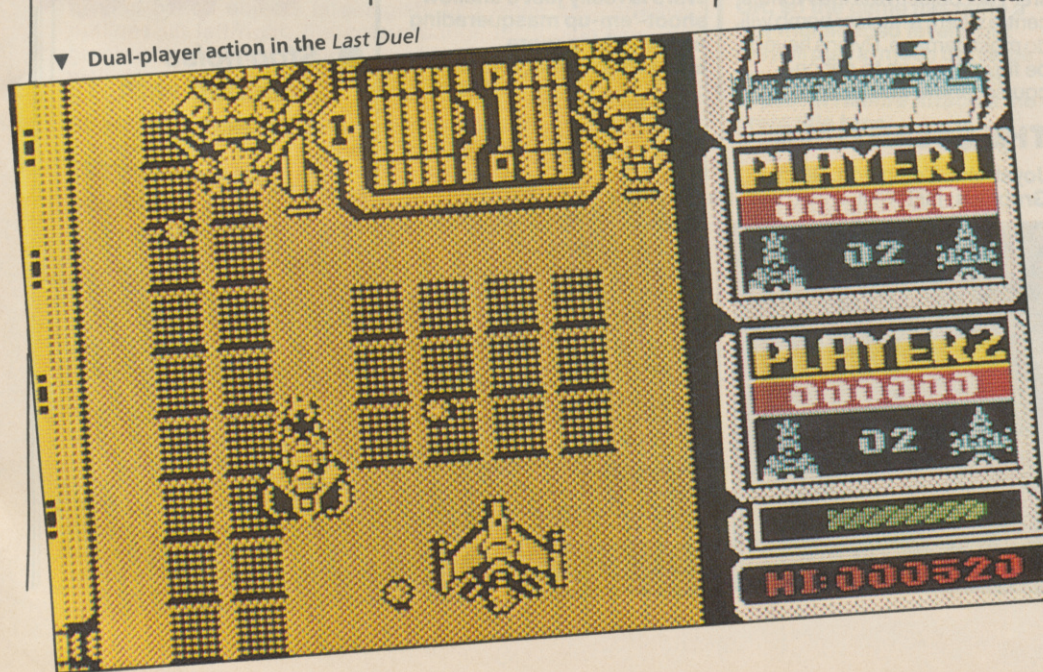


▲ What do you mean, it won't run on LED-free petrol?

scrolling and the car suggest a *LED Storm* clone, but here the scrolling is glitchy and not as fast. The main fault with *Last Duel*, though, is the way progress can easily be made by mindless, continuous jumping and blasting. Only partially compensating for this fault are some impressively-large squirming monsters and the two-player option. Worth a look, but certainly not the game to break my *LED Storm* addiction.

PHIL 70%

▼ Dual-player action in the *Last Duel*



THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: some impressive, large aliens, but dubious vertical scrolling

Sound: in-game effects

Options: one or two players

General rating: don't be fooled by the car – this is not a driving game, but an above average shoot-'em-up

Presentation 77%

Graphics 67%

Sound 70%

Playability 72%

Addictive qualities 69%

OVERALL 70%

RING WARS

● Wringing the last out of a tired genre

Producer **Cascade**
Uranium 235 £8.95 cass
Author **Vektor Graphix**

Sometimes the downside of bad programming is a bit more serious than a spot of colour clash. Take, for example,

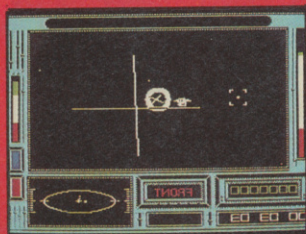
As the pilot of a space fighter you soon come under attack from Ring World defence drones. While your fighter flies on automatic pilot toward the World you flip between six screens trying to blast the drones. Once you're through to the World you fly inside, and immediately come under heavy

RINGING THE CHANGES

- Set bomb timer for at least four minutes.
- Get additional nuclear bombs from Jupiter's fourth moon.
- Note down what useful resources each moon contains.

Fast vector graphics make the first run through the defence drones and anti-spaceship lasers exciting. Unfortunately by the second or third bomb run the appeal has begun to wear off. Despite being years older than *Elite* the gameplay is a considerable step back from that game's complexity and apart from the graphics it's all very dated.

MARK 48% ▲ The arcade bit



an alien fleet of Ring Worlds designed to locate uninhabited planets and extract valuable minerals. Hundreds of them are drifting into the Solar System and widespread human colonies soon discover how well they detect life.

▼ The strategy bit in Cascade's latest



fire. Your objective is the World's centre where a nuclear bomb will do most damage. Pylons have to be flown through to get on course, and once the bomb is

THE ESSENTIALS

Joysticks: Kempston, Sinclair

Graphics: fast, well-drawn wire-frame graphics...

dropped you have get out the way before the timer runs out.

Outside the World you can assess your damage; shield energy is measured on the left, with fuel on the right. Status and weapons screens show ammo levels, damage and faults. To repair these you can hyperspace to the moons of surviving planets. Atmospheric entry is automatic, but manoeuvring into a hanger definitely isn't. The type of services offered by a hanger varies from moon to moon. Once enough Ring Worlds have been destroyed their Mothership will appear, blow it up and you've completed the game.

Warping about space and blasting alien invaders will be familiar to anyone who's ever played the superior *Code-Name Mat*. New elements such as finding various services and bombing the reactor fail to significantly alter the over-familiar and repetitive nature of gameplay. Programming is very professional, however, with some good, fast-moving vector graphics. If you haven't played this type of game before it could prove entertaining for a while.

STUART 61%

PHIL With a title like *Ring Wars* I was expecting a boxing game! But instead, it appears some doughnuts are attacking the solar system. First impressions are good, but misleading: shooting enemy ships is monotonous and there's nothing too remarkable inside the Ring Worlds either. Even with the ability to land on various moons, there really isn't much depth to what promised to be a complex game. Although technically competent, *Ring Wars* is really just a shallow shoot-'em-up masquerading as something more interesting – doughnut buy it.

51%

Sound: ... but only a single laser shot effect
General rating: it doesn't exactly run rings round the opposition

Presentation	72%
Graphics	64%
Sound	28%
Playability	55%
Addictive qualities	47%

OVERALL 53%

● GI Joe in jungle jaunt

Producer **Firebird**
Purple hearts £7.95 cass
Author **Blitter Animations**

Sensitive NATO documents have been stolen and taken into a 'politically sensitive' country. In response a trained assassin, and Killer: The Wonder Dog (!), are bundled into a plane to be taken into the foreign territory. Engine problems mean an early parachute drop, though, separating Killer and the elite



▲ Suspicious looking trees in *GI Hero*

warrior strangely known as an ordinary GI hero.

If you choose to step into the GI's size 11 yomping boots then



● Stop noise pollution with Martech

Producer **Martech**
Earmuffs £8.99 cass
£14.99 disk
Author **Gavin Wade**

Concerned by the number of deafening low-flying jets? Why don't you do something about it? Like writing to your local RAF base, your MP, or blasting them to a zillion pieces with a 20mm cannon? If you're of the latter mind *Hellfire Attack's* for you. No hideously noisy afterburning engines here, just two discreet rotors and a

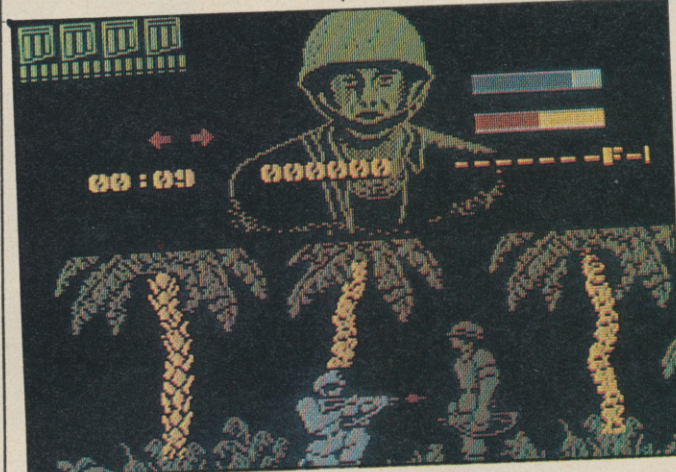
GI HERO

your first objective is to find the dumb mutt (and be careful some Israelis haven't strapped it with explosives). The forest is crawling with troops who you must dispose of. Initially you've just four clips of ammunition, but ammo is littered all over the jungle. To reload the gun you must use a menu system, which allows you to use items (like wire cutters) and turn objects on/off (like the torch for dark caves).

Once found, your poochy pal gives you some vital assistance in defending yourself. But with or without Killer you only have 24 hours to find the papers and prevent an international scandal.

Trudge, trudge, trudge is all you seem to do in *GI Hero*, and although the monotony is occasionally broken by shooting troops I soon found my attention

beginning to wander. The scenery is almost as dreary as the gameplay, just jungle and



▲ Where the flipping heck did he come from?

PHIL Killer is a brave mutt, running at enemy soldiers and biting their jugulars. Like him, the hero and guards are well animated, considering their size, and a large black 'shadow' around them avoids attribute clash. Sound is less impressive, merely consisting of gun shots and quiet footsteps, but even more disappointing is gameplay. Too much time is spent plodding aimlessly around the jungle, shooting the odd enemy. Although *GI Hero* has original qualities, such as the easy-to-use menu system, it is ultimately very yawn inducing.

58%

caves before you get to the base camp. Ambushes with three or more soldiers often proved fatal, even with Killer, who often went

walkies on his own. And after playing this for a while, I too soon felt like going for a walk.

MARK 54%

THE ESSENTIALS

Joysticks: Kempston, Sinclair
Graphics: the extra-large sprites are well-animated
Sound: no tunes, mainly shooting effects

Options: definable keys
General rating: a nice game to look at, but unexciting to play

Presentation	72%
Graphics	74%
Sound	33%
Playability	59%
Addictive qualities	54%

OVERALL 56%

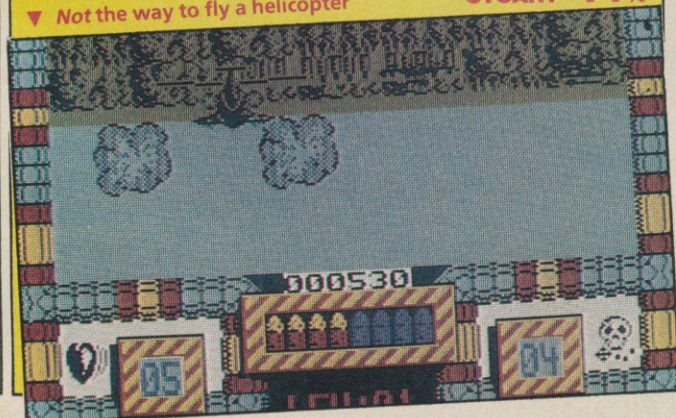
HOW THE DEVIL TO WYNNE

- Shoot only nine aircraft on Level One so you have to redo the Level – no penalty and you can earn more bonus lives.
- On harder levels shoot only required number of enemies and big jets, then fly high and keep out of the crossfire.
- Keep firing even as you're going down in flames – you might still hit something.
- Be liberal with smart bombs – you get them all back when you die or complete a level.

Essentially *Afterburner* with rotors this starts off with an impressive sampled 128K tune. Such technical prowess does not, however, extend to the game itself. The scrolling of ground-based objects is sluggish, and while their graphic outlines tilt left/right, the colour bands for a blue sky and green grass remain completely still. The helicopter itself is well-drawn, but the massive bullets it spits are identical to those fired by the enemy, making combat very confusing. Nevertheless, despite these problems *Hellfire Attack* is fairly playable, albeit rather repetitive and difficult, with a fast and well thought-out multiloop. Worth a look.

▼ Not the way to fly a helicopter

STUART 71%



PHIL Lacking the game content of *Thunder Blade* and the sheer speed of *Afterburner* this is rather second rate. The inlay describes it as 'gripping' but shooting down enemy aircraft is repetitive, while the sluggishness of the chopper soon induces tedium. Yet the biggest problem, literally, is the large helicopter sprite which obscures your view. OK, so the game has quite a few multilooped levels, but they all play in much the same way. It's a pity but the best aspect of *Hellfire Attack* is the great title tune.

48%

rotory 20mm cannon.

As wave after wave of ear-drum bursting jets rush by, blasting away with their guns, you've got to dodge the bullets and blast back. If the action gets a little tough, use a smart bomb to clear the air. On each level there's two or three slow, monster jumbo planes with dozens of engines to destroy as well. Splash the required number of noise-polluting enemies and you go on to the next level when you land. If not, you go around again.

As you'd expect there's a multiloop, but it's very well-

done; load the main program on side one, then flip the tape for the levels. Get killed and you simply rewind to the start of tape two and no messing about with tape counters. Other than that the game's a bit disappointing with enemy bullets very hard to see. Still, graphics are good, there's a great 128K tune and I found it fun for a while.

MARK 70%

THE ESSENTIALS

Joysticks: Kempston, Sinclair
Graphics: well-drawn aircraft, but the scenery is dull and slow-moving

Sound: an amazing sampled title tune and decent in-game effects

Options: demo mode
General rating: a competent 3-D shoot-'em-up, but it's too slow to catch up with the superior *Afterburner* and *Thunder Blade*

Presentation	74%
Graphics	68%
Sound	82%
Playability	70%
Addictive qualities	65%

OVERALL 66%

AFTER BURNER

AERIAL ARCADE ACE

SHAKE. R



 **ACTIVISION**

SEGA®

AFTERBURNER – 'THE ARCADE S

Afterburner™ Sega® are trademarks of Sega Enterprises Ltd. Game has been manufactured under license from Sega Enterprises Ltd., Japan. Marketed and distributed by Activision.
Mail Order: Activision, Blake House, Manor Farm Estate, Manor Farm Rd., Reading, Berkshire. Consumer Enquiries: 0734 311666 Technical Support: 0703 229694.

Available on C64 cassette (£9.99) and disk (£14.99), Spectrum (£12.99),
Amiga (£24.99)

RATTLE. ROLL IT..



Amiga screen shots shown



ST screen shots shown

E SENSATION OF THE YEAR'

Amstrad cassette (£9.99) and disk (£14.99), Atari ST (£24.99),
and MSX (£9.99).

AFTERBURNER – You've played the arcade **smash** – now **experience** the white-knuckled **realism** of a supersonic **dogfight** at home! Using your heat-seeking **missiles** and laser anti-aircraft **fire**, can you be **top gun** against a seething supersonic **swarm**?

Experience brain-numbing **G-forces**; bones **rattling** with the body-jarring **pitch** and yaw . . . scan with your **radar**, **lock on** your target and **FIRE!**

BIG AUDIO DIALLING MIGHT

Dial CRASH for the latest Spectrum info

Throughout its five year history **CRASH** has been widely recognized as the **authoritative** source of unbiased **Spectrum** reviews. And despite the doomsayers the Spectrum's future still looks incredibly bright. This last Christmas the Spectrum was disappearing out of stores faster than you could say 'first-time buyer' and **CRASH** has been crammed month after month with **first** reviews of all the new releases. On the hardware side we've been astonished by MGT's Spectrum-compatible SAM (**first revealed** in **CRASH**), appalled by the PC 200 (also **exposed** in **CRASH**) and now look forward to the Konix Slipstream – the **true** story of the semi-mythical Loki.

If you can't wait for your next exciting issue of **CRASH** be assured we've the answer to your prayers. As from now you can **telephone** three special **CRASH Hotline** numbers for the **latest playing tips, competitions, and the latest software release news**. The first Hotline-only competition prize is a magnificent **Alba Midi System**!

Don't be left behind, keep up-to-date with the **CRASH Hotline**...



WIN AN ALBA MIDI STEREO

Our first **first prize** for the amazing **CRASH Competitions Hotline** is an **Alba MS 4300 Midi system** thanks to **Firebird** (the phone people!). This great hi-fi package includes a twin cassette deck with high-speed dubbing and continuous play, a two-speed turntable (two speeds! cor! – Ed), an amplifier with a six-bar graphic equalizer plus a tuner with long, medium and stereo VHF waveband coverage. Output is 2x5 watts (ow!) and there are both headphone and microphone sockets. Its dimensions are 14.4 x 11.2 x 14.8 inches (okay, okay, that's enough spec details! – Ed).

To severely overcrowd your bedside table with this crucial hardware all you have to do is dial the **Competitions Hotline**, listen a bit, then write down the answers to the three questions we ask you, as well as the all-important tiebreaker.

HOW TO ENTER

Dial the number and listen carefully to the three questions. Write your answers in the boxes provided below then complete the tiebreaking sentence





given to you over the phone. When satisfied with your entry, fill in your name and address, cut out the coupon and send it to: **ALBA HOTLINE COMP, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.** All entries must reach us by March 2 1989 and, of course, all the normal competition rules detailed on the masthead apply.

Keeping up-to-the-minute with CRASH

Printed below are the three *CRASH Hotline* numbers. They're open 24 hours a day and each has 160 lines to prevent the number being engaged. Phone calls will only cost you 25p per minute during off-peak time (Mon-Fri 6pm-8am, Saturdays, Sundays and Bank Holidays) or 38p per minute during standard and peak time (8am-6pm Mon-Fri). If you are using your parents' phone or even someone else's, please ask them first!

Line One: ☎0898 555082 *CRASH NEWS, VIEWS and RELEASE DATES. All the latest on-the-street dates as soon as we get them together with news snippets and thoughts on games that just missed our deadline.*

Line Two: ☎0898 555083 *NICK ROBERTS'S SMOKIN' PLAYING TIPS HOTLINE. Hints 'n' tips on the latest releases thanks to Mr Cruciality himself.*

Line Three: ☎0898 555084 *I WANT MY ALBA STEREO LINE. Listen carefully for we only say this once (every two minutes!) and the first prize is a terrific midi system from Firebird!*

The **CRASH Hotline** is brought you by **CRASH Ltd** in conjunction with **Chatterbox Ltd.** Fair enough!

ROMANTIC ROBOT

present

THE YEAR OF THE ROBOT

GENIE works with MULTIPRINT, MULTIFACE 1 and MULTIFACE 128 only.

GENIE

GENIE can disassemble ANY RUNNING program at ANY point. Install GENIE into MULTIFACE or MULTIPRINT. LOAD any program. RUN it. STOP it whenever you wish and let GENIE disassemble it. GENIE can also DUMP contents of memory or Z80 registers, etc. VIEW and ALTER contents of memory or Z80 registers, etc. Essential for any mcode user.

THE ULTIMATE SPECTRUM PARALLEL PRINTER INTERFACE.

MULTIPRINT

INSTANTLY usable software in ROM. LIST, PRINT and COPY plus a unique FREEZE BUTTON to stop any program and change any printing parameter (line, COPY speed & size, LINE feed, width, spacing, margins, etc.) any time. Also fully PROGRAMMABLE in BASIC. Manual gives a JOY TO USE. Built-in MULTI-TOOLKIT. With 1.2m printer cable.

MULTIFACE - THE ESSENTIAL SPECTRUM COMPANION

multiface one + 128

MULTIFACE can stop ANY program at ANY point and COPY it to disk cartridge, water tape. It works every time, is FULLY automatic, menu-driven, user-friendly, idiot-proof. Absolutely EASY to use - just load a game, push a button to FREEZE it and let MULTIFACE COPY it. Option to SAVE and COPY screens. Most efficient COMpressing. Built-in unique MULTI-TOOLKIT - essential for poking, hacking, etc. 8K RAM extension - vital for GENIE, LIFEGUARD, etc.

MULTIFACE 1 has a joystick interface and works in 48K mode. MULTIFACE 128 (not for Watadi ves) in 48 & 128K mode. Disc price and + D versions on request.

VIDEOFACE digitiser turns pictures from a video camera or recorder into standard hi-res Spectrum screens. Screens can be copied to printer, incorporated into other programs, saved to tape or drive disk. animated (6 different screens can be held by VIDEOFACE and changed as you wish).

VIDEOFACE is menu-driven, fast and very easy to use - all you need is a Spectrum, COMPOSITE VIDEO signal and a lead.

VIDEOFACE

You can even adjust the grain (the black and white ratio) and create special effects! VIDEOFACE is a unique, most useful and powerful add-on.

ONLY £6.95

LIFEGUARD IS AN INFINITE LIFE FINDER. INSTALL IT INTO THE MULTIFACE ONE OR 128, LOAD ANY GAME AND

LET LIFEGUARD LOOK FOR INFINITE LIVES, AMMO, ETC. ONCE IT FINDS IT YOU'LL WIN AGAIN AND AGAIN...

LIFEGUARD

INFINITE LIVES FINDER

"A GOOD REASON TO BUY SPECTRUM+3" (Crash)

"If you want to use commercial Spectrum software with the Plus 3 you MUST also buy a Romantic Robot Multiface 3, or Amstrad's disk drive will be useless with commercial software. The Multiface 3 is the ONLY reliable way to copy Spectrum programs to disk."

(Computer Shopper)

"Any 128K+3 owner will find it a wonderful device, indispensable even."

(Sinclair User)

"THE PLUS 3 DISC SOLUTION" (Sinclair User)

multiface 3

THE ONE AND ONLY FULLY AUTOMATIC TAPE AND DISC COPIER

THE YEAR OF THE ROBOT - BE PART OF IT

I enclose a cheque/PO for £

+ p&p to UK & Europe

£ 1.00

Overseas

£ 2.00

or debit my



No

Name

Card expiry

Address

MULTIFACE ONE

£ 39.95

MULTIFACE 128

£ 44.95

GENIE ONE

£ 9.95

GENIE 128

£ 9.95

MULTIFACE THREE

£ 44.95

M3 w/through port

£ 49.95

MULTIPRINT

£ 39.95

VIDEOFACE DIGITIZER

£ 44.95

LIFEGUARD

£ 6.95

MUSIC TYPEWRITER

£ 7.95

SPECTRUM+3 DISCS

£ 2.75

SPEC.+3 TAPE LEAD

£ 2.95

ROMANTIC ROBOT UK LTD

54 Deanscroft Ave, London NW9 8EN

24 hrs



01-200 8870

CR

PHIL KING'S ADVENTURE TRAIL

Samara ventured into the long dark corridor, deep within CRASH Towers. What was that strange noise? It sounded like an animal, but what was it doing here? Had one of Phil's sheep lost its way? Yes, the sound was a distinct 'baa'.

But then, Samara heard a strange voice whispering 'Come closer, come closer'. A shiver ran down her spine as she found the way ahead was blocked by a pile of old AMTIX! binders covered in cobwebs. She could now hear footsteps coming from behind her. But as the shadows grew shorter, her anguish was quelled. The face of Phil King appeared from beyond the shadows, but he wasn't happy. In fact, he looked decidedly bedeviled by what stood before him.

'Baa! You've insulted one of my sheep for the last time Miss Sugar Face! One of my cousins lost his eyes to your Christmas lunch and now he has to have a guide-chihuahua. So now prepare to meet *your* death: we're having Samara pie for dinner.'

With that, Phil drew an axe from his side. He swiped at Samara's neck, one blow was enough. Torrents of crimson blood spewed out in a jet, leaving her head lying in the pool of her own blood. The hardened adventure reviewer had been in many dangerous situations in her travels but this time her luck was out – never to see Egypt again.

Mercifully, she could not know that the depraved reviewer then lopped off her limbs and tore out her intestines to make a nice pie (with Grandma Mangram's special pastry recipe), put it on gas mark 4 for two hours and had a nice dinner with diced carrots, mashed potato and treacle tart for pud. The adventure column was now King's. He sat down contented with the thought this was the best meal he'd had in ages.

DIABLO!

**Nebula Designs Software,
£7.95**

In the 22nd century human civilisation has spread throughout the galaxy under the 'benevolent' control of massive corporations. Nuclear-powered, faster-than-light travel is a fact of life and the ESS Discoverer

is regarded as nothing special. A research ship it was sent to get biological specimens from the distant worlds of Edanus. When it failed to return it was presumed destroyed by rebels. That is, until it was discovered by some passing starfighters, drifting aimlessly through space, apparently deserted but for a glimmer of light in the cockpit and an eerie, devilish



silhouette there.

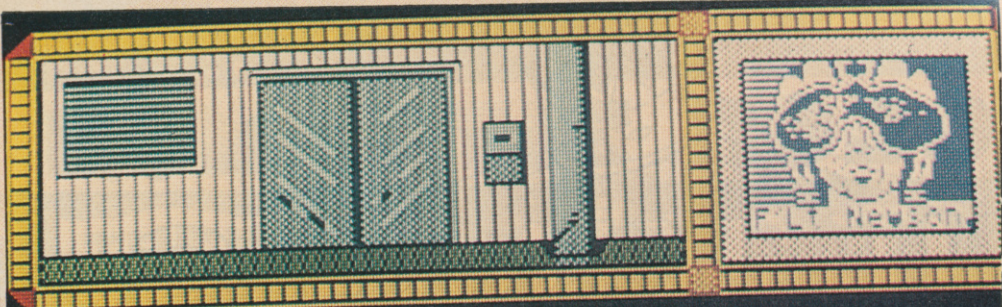
Diablo! is a homegrown adventure by Mark Cantrell and comes complete with extensive packaging, including a Player's Guide and Investigation Dossier. Detailed and informative these give a good sense of atmosphere. The program itself comes on two cassettes, for 48K and 128K owners.

The adventure begins once a special shuttle has docked with the Discoverer. The shuttle's crew consists of three military personnel, a doctor and a civilian. Four of these can be controlled individually (by using CONTROL 'whoever') while the civilian, Lawson, just wanders around on his own. Profiles of the crew are included in the dossier along with a rough plan of the Discoverer.

A few turns into the game a

bomb goes off. Bad enough in itself if you're in the wrong location, but investigation reveals that only one of your own crew could've planted it! While glumly considering suspects you might admire the game's presentation, which is excellent. A graphic view is given for most locations, shown in a window at the top left of the screen alongside a well-drawn portrait of the current character. Verbose descriptions scroll upwards in the bottom two thirds of the screen, in either normal or stylised fonts according to your choice. You can also switch between normal compass directions and a more appropriate starboard, aft, port system.

The attention to detail in the presentation is also shown in play itself. The PAW parser is typically refined with useful OOPS and



You can also see the lift DOORS and the 'Lift Call' BUTTON.

PRESS BUTTON
An electronic voice speaks "I'm sorry but this lift is out of order. We hope the malfunction will be repaired soon. Have a rotten day!"

AGAIN commands, as well as the usual RAMSAVE. But where it really scores highly is in the extensive EXAMINE and SEARCH commands which can be used for the majority of objects and features.

Interaction between characters is also very good, and important to make progress. Speech is achieved by typing SAY TO character x 'whatever' and there is also a RADIO command when your crew is separated. Characters can be told to do almost any action or in the 128K game, even to LOOK AROUND the ship. But by far the most useful instruction is FOLLOW ME, so by controlling one character who has told the others to follow him/her, you can move the team en masse.

The very tense atmosphere of the game is achieved by some great descriptions, telling how you feel worried about what could be lurking in the shadows. Such worries are well justified as you'll often end up reading spine-chilling accounts of death: pulped bones and decaying flesh are detailed in almost 'video nasty' depth. Clues to the demise of your crew members are weird scratch marks on some of doors and shreds of a blood-stained lab coat. It seems a strange alien creature is on the rampage. And if you find and play Dr X's data disk you can discover exactly what it is.

Diablo's superbly suspenseful atmosphere is obviously reminiscent of the excellent *Alien* film, but there's more than enough plot differences to keep you off-balance. With three large decks to explore this is a remarkable challenge, not least because of its homegrown origin.

If you fancy having your intestines ripped out etc, you can get hold of this excellent adventure for £7.95 (inc p&p) direct from Mark Cantrell at 112 Upperwoodlands Road, BRADFORD, West Yorkshire BD8 9JE.

Overall 88%

THE LOST LEGACY OF XIM

Skyslip Software, £9.95 tape

The name's Shaw, Rick Shaw, and no-one takes me for a ride. After solving *A Simple Case Of Espionage* (reviewed last issue), I've got yet another devious crime to solve. Apparently a precious jewel-encrusted bird has been stolen. Once owned by the ancient dictator Xim its current owner, Sir Robert Harker, is more than a little worried.

The thieves have sent a ransom note to Harker demanding two million pounds. If it's not delivered in six hours time the eagle will be sold on the black market. My only clue is the postmark of a small coastal town on the ransom note. It's not much, but Sir Robert offers the use of his private jet. This is the way to travel, huh?

Unfortunately when I awake

from a short nap I find myself bound hand and foot on the cabin floor. After a brief moment of confusion my razor-like mind drew the obvious conclusion that the pilot was in the employment of a mysterious third party, also interested in buying the eagle. While mentally patting myself on the back for the speed of my deduction I was disturbed to hear gunshots in the cockpit. Seconds later a man rushed out and the plane began to dive.

I've been in plenty of tough corners in my time, but even I began to sweat about this one. Initially the problem seemed simple - there was a glass tumbler on a nearby table; knock it over, smash it and I'd be out of here faster than your grandmother could say 'drugged drinks'. Unfortunately getting to the table proved virtually impossible, my body just wouldn't respond to any of the normal commands. In frustration

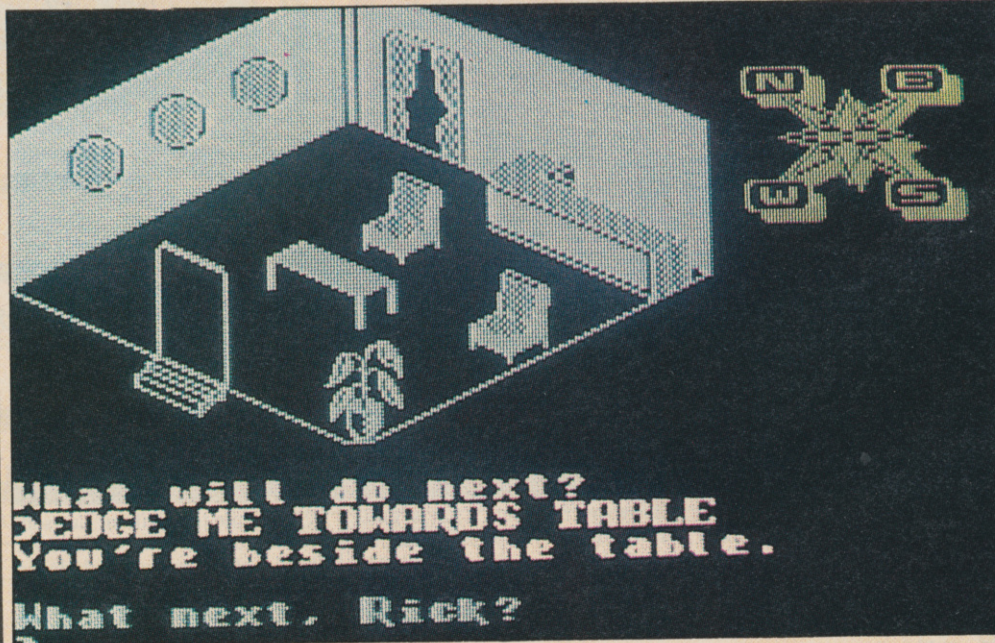
I took out my portable phone and gave Skyslip a call, or two or three. They finally gave me the number of Mr Adams, but he never answers the phone - all this hassle on the first location! Finally, just as I was about to toss the tape into the incinerator, I got a call. The solution was amazingly obscure: EDGE ME TOWARDS TABLE (and only this exact wording works - EDGE TOWARDS TABLE does not).

Once this problem is overcome, finding a parachute and getting out of the plane was easy. But it's not long before the restrictive vocabulary impedes progress once more. After landing in the sea and swimming to the shore, I found a rucksack. But neither EXAMINE or SEARCH RUCKSACK, reveals its contents: the more obscure LOOK IN RUCKSACK does.

Further exploration of the countryside and nearby town exposed yet more input problems. For instance, in the police station I could pick up a pair of handcuffs, which on being examined revealed a small key, but this can only be picked up by first dropping the handcuffs and subsequently taking the key! This sort of problem is enough to make a vicar kick in a stained glass window, to paraphrase a famous colleague. Further irritation is provided by the limited number of turns before you die of hunger, if food isn't quickly found.

On the plus side, the 128K version of the game is graced with nice graphics, present in every location, including some good isometric views of rooms (as in *A Simple Case Of Espionage*). But good presentation does little to enhance such an ill-thought out adventure, with gameplay reduced to a series of word-finding exercises. Only detectives desperate for a new case should consider this one.

Overall 42%



SKATE OR DIE™



NOW on the SPECTRUM

Cassette£8.95
Disk.....£14.95

Electronic Arts produces Home Entertainment Software on most Computer formats. For a complete product catalogue, please send 50p together with a stamped and self-addressed A5-sized envelope to: Electronic Arts "Catalogue Offer", Electronic Arts, 11-49 Station Road, Langley, Berks SL3 8YN.
HOW TO ORDER. Visit your local retailer or call Slough (0753) 46465 for the location of your nearest stockist. Dealers please call (0753) 40906.

ELECTRONIC ARTS®
Home Computer Software

Electronic Arts™

TIME TO TALK

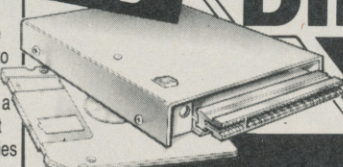
The PLUS D

£52.13

+15% VAT = £59.95

MGT's premier product. The disc interface that snapshots all your cassette software to disc in seconds. The printer interface that prints out ANY screen. Simple enough for a beginner, yet state of the art for the expert user. With all the Sinclair Interface 1 facilities and commands, the PLUS D will transform your 48K, 128K or +2 Spec.
Call for details of new vers.
-2A and -3

Ask about +3/+2a versions of the
PLUS D



MGT DIRECT

It's time to talk about quality of service. Lots of companies are advertising lots of products at excellent prices. But we believe that our customers deserve more than that. We believe that you have the right to demand an honest, in-depth appraisal of a product's strengths and weaknesses before you buy. We believe you should get a description in terms that you can understand and perhaps an expert comparison with rival products. And if you decide to buy, you need to be assured of first-class service afterwards. Not just if a product is faulty, but also if you need help in installation or if you simply come up against a problem that stumps you.

At MGT we've got the time to talk to you. We only sell products that we like and use ourselves. We understand what we sell, and every one of our sales team is trained to help you, whether before you buy or after. And even if we don't know the answer to your question, or if we don't stock the product you're looking for, we'll find out about it for you.

And the time to talk can be almost any time. Our phone lines are open till 7p.m. Monday to Friday in case you want to call us after work — even after that, there's an answer-phone. Just leave a message and we'll call you back.

It's time to talk to MGT first!

DISC DRIVES



3.5", 5.25", single or dual, for Spectrum, QL, BBC, Atari, PC - you name it, we sell it! Because you're buying direct from the manufacturer, you won't find better drives at a better price! Each drive has a built-in power supply and connection cable.

DISC DRIVE	EX-VAT	VAT INCL
3.5" Single drive	£ 86.91	£ 99.95
3.5" Dual drive	£165.17	£189.95
5.25" Single drive	£130.39	£149.95
5.25" Dual drive	£217.35	£249.95
3.5" & 5.25" Multi	£199.96	£229.95

Hobbyists! Call for prices on bare drives!

SUPER SAVER PACKAGE

£121.70

+15% VAT = £139.95

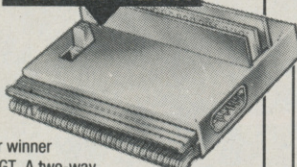
The PLUS D and 3.5" DSDD Drive. All you need to turn your Spectrum into a powerful, modern disc-based computer! Load 48K in 3.5 Seconds and 128K in just 10 seconds "Best Buy" ... Your Sinclair. "Another Amstrad Crusher" ... Crash.

HURRY! Offer ends Feb 7th.

THE TWO FACE

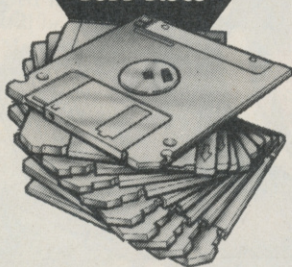
£26.04

+15% VAT = £29.95



Another winner from MGT. A two-way connector with a switch that lets most incompatible interfaces work together! The TwoFace also has a built-in joystick interface. Beta/Opus disc drive users can now transfer all files to PLUS D. The ultimate in Spectrum gadgetry!

MGT BRAND 3.5" DSDD DISCS



MGT Name - MGT quality, with a lifetime guarantee! Sold individually or in plastic boxes of 10 with labels.

New Lower Prices!

	Ex-Vat	W/Vat
10 discs	11.26	12.95
20 discs	21.70	24.95
30 discs	31.26	35.95

CARDEX DESK TOP PUBLISHING

£32.87

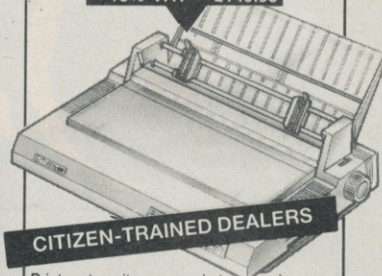
+15% VAT = £37.80

Finally, real DTP for the Spectrum! A word processor, graphics and page layout designer all in one and supplied on disc. "Worth every nickel you'll pay for them" ... Your Sinclair.

PRINTERS

from £130.39

+15% VAT = £149.95



CITIZEN-TRAINED DEALERS

Printers to suit every pocket and every computer — from 9-pin to laser printers, normal or wide carriage. Free connection cable with every printer sold.

The Star LC10 in mono or colour with paper-park and font-select buttons.

The Citizen 120D — sold to 70% of UK schools. The new 180E — faster printing, font select, 2 year guarantee.

Typical prices (inc. VAT)

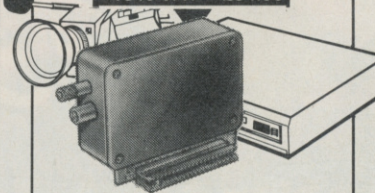
Star LC-10	£229.95
Star LC-10 Colour	£259.95
Citizen 120D	£149.95
Citizen 180E	£199.95
Citizen MSP 15E (wide carriage)	£258.75
Citizen HQP 40 (24 pin)	£449.00
Citizen Overture 106 Laser Printer	£1250.00

Ask for our detailed brochures on these and other printers in our range.

VIDI-ZX DIGITISER

£30.39

+15% VAT = £34.95



The digitizer that has the competition on their knees! Capture images from any video camera or recorder and use the PLUS D to store them to disc for editing later with the Animator 1. Has shading, high resolution and no distortion.

We also have a limited stock of the original Spectrum 128K Computer at £8.95 and a wide range of serious and games software. Call for details.

PICK-POKE-IT

£13.00

+15% VAT = £14.95

The hacker's dream software. Break into any game and list the memory in Hex, Decimal, Ascii, or disassemble it instantly. All the PLUS D's snapshot features fully supported. Type in all the magazine pokes and even customise your own games.

POSTAGE CHARGES

Packages less than 1kg	£2.00
Standard Securicor	£4.50
Express next day delivery	£12.00

(subject to availability)

THE MGT GUARANTEE

1 year full guarantee on all our products. Simple repairs procedure - you send, we fix! No-quibble full cash refund on hardware if you're not satisfied within 14 days!

I enclose a large SAE for more details of MGT products.

Name: _____
Address: _____
Tel: _____

MGT DIRECT
Lakeside, Phoenix Way, Swansea Enterprise Park, Swansea
SA7 9EH, UK. Telephone: (0792) 791100. Fax: (0792) 791175



LM'S FORUM



'New Year cheer 'twixt seasons drear' – that's what grandma muttered when I got home rather late on New Year's Eve (well, it was New Year's Day, actually). I'm not normally one for pubs – horrible crowded, smoky places that they are – and I felt quite unwell surrounded by all those people in the remote Abbey Inn where the Towers crew dragged me.

But that's all by the by – I trust *you* all had suitably merry holidays, and that the next season won't be too 'drear' where software is concerned! 1989 should be interesting, what with yet more Freescape developments promised by Incentive, some excellent-sounding Sega coin-op conversions from Activision, WEC Le Mans and Dragon Ninja from Ocean, the usual magnificent simulations from Electronic Arts, The Munsters from Again Again, and a couple of big licences from Grandslam – Thunderbirds and The Running Man...

How do they do it all? Well, this month's £30 software prize goes to someone who wants to know just that.

HOW TO SUCCEED IN SOFTWARE BY REALLY TRYING

Dear Lloyd

We've all heard of these so-called whiz kids who spring out of nowhere with a brilliant game once in a while, but what are the chances of being one? Very minimal I expect.

Well, what jobs are on offer in the computer world? And are they guaranteed? I expect that most computer programmers have their moments of glory and then are never heard of again.

If your heart is set on joining a company, which is best to join? Probably a fully established one, such as Ocean.

If you want to get in on the computer scene do you need any experience? Is it possible for an ordinary person to send in ideas for games to receive any money and possibly a job?

What about a job as a reviewer, like yourself – is any experience necessary if someone wants to join the team?

I think most of us would like to

be in the limelight sometime so we try to produce our own games.

We buy utilities such as GAC or PAW. Once we have produced a reasonable game, off it goes to a company. What sort of chance of getting a reply is there? Companies must get inundated with them!

Scott Maddy, Basildon

It's certainly very tough to become a professional programmer these days, but the news isn't all bad. There is no obvious 'training' for programmers – it's not like being a dentist or a chartered surveyor – so software houses really do look at what they're sent, because that's the only way new geniuses are discovered.

Having said that, they're unlikely to be interested in anything written with a game-

creation utility – anyone worth their salt these days writes in machine code.

Large full-price houses such as Ocean increasingly employ teams of specialists: some people who only work on graphics, others who only work on music, others who only work on game-design. But it's very difficult for a lone freelancer to match the quality of these teams, simply because it would take so long.

So if you've written a game which is half-decent, a budget house is a much better bet. Code Masters, Alternative, Mastertronic and Silverbird are the big names in budget now. Of course, they tend to pay less than full-price houses.

Jobs as reviewers are very

difficult to find – there can't be more than 20 or so Spectrum reviewers in the entire country. But when a position does come up, once again it's a question more of ability than of letters after your name.

Finally, don't forget there are thousands of people working in computing *outside* the games area – and much as I hate to use CRASH to promote another magazine, I'd advise you to look out for the May issue of THE GAMES MACHINE (on sale April 20). Erstwhile Man Ed Barnaby Page, who's now across the hall at TGM, tells me he's doing a big feature that month on all the different ways to make a living through bits and bytes.

LM

READERS' ALL TIME TOP 30

Position	Issue 48's position	Title	Software house	Number of times in Hotline chart	Number of times Number One	Score
1	(1)	Match Day	Ocean	43	0	926
2	(2)	Elite	Firebird	33	2	801
3	(3)	Commando	Elite	29	5	663
4	(18)	Gauntlet	US Gold	19	8	486
5	(4)	Lords Of Midnight	Beyond	29	0	454
6	(6)	Paperboy	Elite	20	2	450
7	(5)	Bombjack	Elite	17	0	394
8	▶	Head Over Heels	Ocean	16	0	393
9	(22)	Cobra	Ocean	18	0	387
10	▶	Enduro Racer	Activision	14	1	342
11	(7)	Sabre Wulf	Ultimate	16	6	313
12	(8)	The Way Of The Exploding Fist	Melbourne House	17	3	311
13	(9)	Knight Lore	Ultimate	14	3	304
14	(15)	Quazatron	Hewson	16	1	303
15	(16)	Batman	Ocean	18	0	301
▶		Renegade	Imagine	11	1	301
17	(20)	Uridium	Hewson	13	0	298
18	▶	Starglider	Rainbird	16	0	297
19	(10)	Atic Atac	Ultimate	13	0	294
▶		Exolon	Hewson	11	2	294
21	(11)	Hypersports	Imagine	16	1	293
22	(12)	Match Point	Psion	19	0	289
23	(13)	Ghosts 'n' Goblins	Elite	13	3	280
24	(14)	Jet Set Willy	Software Projects	12	3	279
25	▶	Zynaps	Hewson	12	0	274
26	(16)	Daley Thompson's Decathlon	Ocean	16	0	271
27	(19)	Doomdark's Revenge	Beyond	15	0	263
▶		Match Day II	Ocean	9	4	263
29	(21)	Manic Miner	Bug Byte	13	1	258
30	(23)	Alien 8	Ultimate	12	1	249



MY CHART BELONGS TO YOU

Dear Lloyd

I must complain about the charts in CRASH. As I have bought CRASH from Issue 30 I am astonished that the charts never seem to change the games, but always show the same games month in and month out in a different position.

Why is this? I bet I could name ten games at least that will be in the charts in, say, four months' time. Please try to do something to change this, and put the games that people think should be there to be there.

C Bradshaw, County Durham

The CRASH charts depend on readers' votes, so if anyone's going to change things I think it has to be YOU!!!!

Obviously, some games are perennially popular, and these deserve to hold their places in the charts for months and years. But because the number of chart votes

received is relatively small, just a handful of extra votes one month can tip the balance in favour of a particular game. That's why titles often seem to go up and down without rhyme or reason.

But to see just how much things DO change in the charts, take a look at this mammoth set of figures compiled by longtime CRASHer Stephen Jaggard of Newmarket. Last year he sent us an all-time Hotline chart for Issue 48, and here's an updated version covering Issues 4-58.

It should mostly explain itself, but there's one thing to note: the 'points' in the far right column are constructed by giving a game 30 for each time it's Number One, 29 for each time it's Number Two, and so on down to 11 points for each appearance at Number 20. (There used to be 30 entries in the Hotline chart, so then Number 30 got one point.)

LM

LOST NINJA?

Dear Lloyd

The queries that have come to my mind over this last year have been small and would be of no bother to you in that busy tower of CRASH.

A problem I've had is with mail-order companies. What annoys me is that they advertise games they haven't got. One example was *The Last Ninja*. CRASH previewed it in the July 1987 issue, and in January 1988 it was advertised by Activision. Foolishly, I ordered it from a mail-order company and waited three months before I found out that the game was to be abandoned and before I received my money back.

But in September I ordered System 3's *Last Ninja 2*. I was convinced that it was finished, as a POKE for it had been printed in another Spectrum mag, and the CRASH demo had been released. So I ordered it from a different company.

Now in Issue 59 you reviewed it, and after waiting for nearly two months I still haven't received my game.

I'm sure my first delay was not the fault of anybody, just a mistake and I accept that. But this second delay must be the fault of someone, unless *Last Ninja 2* doesn't exist either and some-

one's been leading me on.

Chris Welstu, Wellingborough

Mail-order companies are an excellent idea as they save trudging round the shops, but unfortunately there are a lot of cowboys in the business. If you order a game and you don't receive it within a reasonable period - say three or four weeks (the company's ad will usually say how long it takes) - KEEP ON BOTHERING THEM.

Phone and write once or twice a week till you've received a satisfactory answer - it may be that the game really was delayed in production, but they shouldn't advertise it unless they know it's going to be available.

If you still don't have any luck, ask your parents if they'd get their lawyer to write a letter. This will cost very little if anything at all - it's a very quick job for a solicitor's office - but will probably scare the company into dealing with your order.

Finally, if nothing comes of that either, contact the Advertising Standards Authority.

They don't have any legal power, but investigate hundreds of cases of misleading

FROM RUSSIA WITHOUT GRAPHICS

Dear Gentlemen

I am a Russian computer amateur writing to you on an urgent matter. I am 15 years old and I am learning in an English-oriented school; since the age of 14 I have been a computer lover.

Because there is a shortage of good computers in our country, almost all Soviets who like computer games and programming must make little computers themselves, but some problems arise with components purchase. Nevertheless, a year ago I made my first machine - the design was taken from a Soviet hobby magazine.

Computer includes a 8080 CPU, 2K 2716 EPROM and 32K RAM of 16 4116 ICs [integrated circuits]. It is working pretty well, but has poor graphics - the video controller includes an 8275 IC.

Because of that, many of us are looking for a design with better graphics, and containing components available in Russia.

A year ago many chose the Sinclair ZX Spectrum model, which meets these requirements, though some rare special ICs like the ULA controller are not available here.

Looking through recent Sinclair magazines, I saw your advertising material devoted to the Spectrum +3 model and was very interested in it. I need to get some info from you about it: schematic diagrams, EPROM BIOS content, etc.

I would love to purchase your +3, but as you may know we Russians can't handle foreign currency, it's a crime here, and we can't use roubles [Soviet currency] for overseas purchases, either.

You may be interested to know that some Russians who have purchased the ZX Spectrum while abroad as tourists have sold it here for more than 2,000 roubles [about nine months' average wages]. But the customs and government

have banned or limited the purchase of computers abroad, enlarging the interest and speculation everywhere.

I am writing this letter using a 'home-brewed' Sinclair ZX Spectrum in 'Russian style', made by one of my friends. Oleg Matveyev, Post Office Box 47, Arkhangelsk, 163068, USSR

Can anyone help Oleg by sending him circuit diagrams etc of the +3? He asked for his letter to be sent on to Amstrad, the Spectrum manufacturers, which we'll do - but I thought a reader might be more willing to assist.

It's amazing how much the Spectrum is selling for on the Russian black market - much the same is true of other Western electronic luxuries, like video recorders. Though the Soviet authorities have developed their own PCs and mainframes, they obviously haven't got into home computers yet, despite that wonderful Mirrorsoft game Tetris, which came from Russia!

Unfortunately, they're also hampered by somewhat ridiculous American laws which forbid many US computer companies to sell advanced technology into the USSR. So much for international understanding...

I tried the Department Of Trade And Industry to see if there was any problem with sending Spectrum circuit diagrams to the USSR, but it seemed all of Whitehall was still away on Christmas holiday. (Nice work if you can get it.) So, as grandma says, on your head be it!

Oleg's letter has been edited a little to make it clearer, but his English wasn't bad... no worse than half the dialects I hear in little Ludlow.

LM

advertisements, and publish regular reports - which seriously embarrass the firms mentioned! The ASA, which is a very helpful and sensible organisation, gets particularly upset at people who advertise things which aren't available.

Their address is: Brook

House, 2-16 Torrington Place, London WC1E 7HN. If you do get in touch, let them know CRASH sent you - and ask for a copy of their Silver Jubilee information booklet, which is fascinating!

Good luck, LM



ONE MAN'S CHOICE

An all-time Top Ten

- ☆ Joe Blade II
- ★ Barbarian
- ☆ Trapdoor
- ★ Dizzy
- ☆ Uridium
- ★ Manic Miner
- ☆ Cosmic Wartoad
- ★ M.O.V.I.E.
- ☆ U.C.M.
- ★ Supertrolley

PS Am I the first person to finish *Joe Blade II*? Just to prove I'm not telling porkies, here is the end message:

'Congratulations! You have performed very admirably in completing your clean of the city.'
Benjamin Durkin, Hampshire

I'M THE ONE WHO CARES ABOUT YOU

Dear CRASH

I am just writing to say thank you for producing such a high-quality magazine.

It is totally brilliant – up-to-date reviews, fantastic cover tapes, brilliant prizes and much much more!

CRASH is megabrill, every review is in colour and not blurred, fantastic cover games, tech news, video news, millions of competitions with brilliant

prizes, millions of pages, millions of reviews, playing tips and much, much more!

But my only disappointment about the magazine is that there is no page on the latest arcade machines and no arcade games charts. But who cares! While every other magazine is going down in standards yours is going

up and up, a pleasure to read and buy.

Gary Holcombe, Gwent
PS The *RoboCop* demo was great!

I've just noticed my hat doesn't fit anymore.

LM

More charts than a Nick Roberts disco this month, eh? Well, I could have written reams about Stephen Jaggard's Hotline discoveries, but I'll leave that to you – letters analysing what the chart shows will be very gratefully received.

'Make and mend, there's ne'er an end' – another of my grandma's more depressing sayings. Sometimes, and I know I shouldn't say this but I can't see her minding, I wish she'd look on the bright side of things!

I do, and I hope my postman does too, considering all he has to deliver to:

LLOYD MANGRAM'S FORUM

CRASH

PO BOX 10

LUDLOW

SHROPSHIRE SY8 1DB

And please write 'personal attention of Mr Mangram', or something like that, on the envelope, as I prefer to open them myself. Same place next month?

ATARRIBLE DECISION

Dear Lloyd

Recently, late August in fact, I bought an Atari ST. I thought it was a far superior computer to my trusty 128K Spectrum. The graphics were amazing, the memory was massive and the Summer Pack seemed to be an excellent deal. I saved up a bit of cash and borrowed the rest from my mum.

The next day, I strolled into my local computer shop with £400 and asked for an ST. With paying cash, I got a mouse mat and joystick lead free as well.

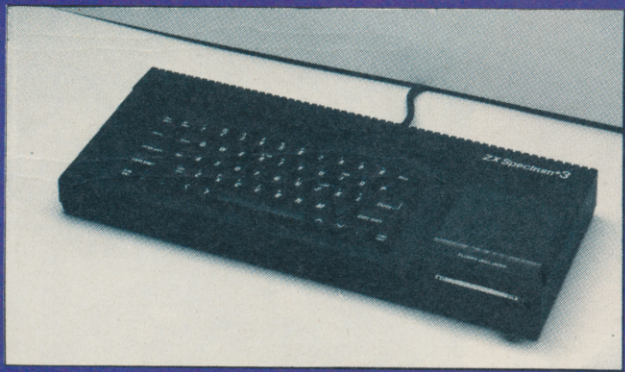
That was probably the most stupid financial decision I had ever made. Now, two months later... I have realised what a wonderful computer the Spectrum is!!! My advice to anyone that is thinking of upgrading to an ST is, don't!! Instead, just buy yourself a +2 or +3, because you'll probably find that you'll begin to get bored with the ST games and realise what a stupid mistake you've made.

Anybody that says 'Spectrums are dying' is completely wrong – the Spectrum is stronger than ever!!!
Les Floyd, Carlisle

I agree – though there are some good games on the ST and Amiga, the games alone don't justify spending £300 or more. The only time to consider an ST or Amiga, in my opinion, is if you are very strongly interested in graphics work.

Some would say music-making is also a reason to buy the ST (not the Amiga – no MIDI port), but judging from full bookings at the Bates Motel the Spectrum's still just fine for that!

LM



MEGASAVE FANTASTIC SAVINGS

Action Service	D1 5.95	Flight Ace	D3 9.95	R-Type	6.45
Afterburner	6.95	Fair Means or Foul	D2 5.50	Rex	D1 5.95
Airbourne Ranger	6.99	G. Lineker's Hotshot	D1 5.50	Super Hang-on	6.75
Alter. World Games	5.95	G. Lineker's Sup Skills	D1 5.50	Star Wars	D1 6.45
Apache Gunship	D4 6.95	Game Set & Match II	D5 8.95	Streetsfighter	D2 6.50
Arkanoïd II	D1 5.25	Giants	D1 10.50	Soldier of Fortune	D2 5.25
Alien Syndrome	D1 5.95	Garfield	D1 6.00	Skate Crazy	D1 5.50
Action Force II	D1 5.50	Guerilla War	D2 5.25	Summer Olympiad	5.45
Buggy Boy	D1 5.50	Gold/Silver/Bronze	D5 10.95	Salamander	D1 5.25
Boot Camp 19	6.45	Heroes of Lance	D4 6.95	Samurai Warrior	5.15
Bubble Bobble	5.25	History in the Making	16.95	Super Sports	D1 5.50
Bards Tale	6.95	Hellfire Attack	D4 6.95	Supreme Challenge	D5 9.95
Bionic Commandos	D1 6.00	Ikari Warriors	D2 5.95	Savage	5.95
Beardsley Int Soccer	5.95	Intensity	D2 5.25	Stealth Fighter	7.25
Black Tiger	D1 6.00	Ingrid's Back	D3 9.95	Stuntman	D1 6.45
Barbarian II	D2 5.50	Karnov	6.45	Space Racer	D2 5.95
Butcher Hill	D1 5.50	Konami's 10 Hits	D3 6.95	S.D.I.	5.45
Batman II	D1 5.95	Karate Ace	D1 8.95	Storm Lord	D1 5.95
Bobby Yazz Show	D1 5.50	Last Ninja II	8.50	Space Ace	D3 9.95
Bombuzal	D2 5.50	Laser Squad	6.25	Spitting Image	D1 6.45
Cybernion 2	D4 9.50	Lancelot	D5 9.95	Sanxion	D2 6.95
Carrier Command	D4 9.95	Live and Let Die	D1 6.25	Superman	D2 5.90
Combat School	D1 5.25	Led Storm	D2 6.75	The Double	7.55
California Games	D1 6.25	Magnificent Seven	D3 6.50	Time Stood Still 128	D1 5.45
Crazy Cars II	6.25	Matchday II	D2 5.45	Target Renegade	5.45
Champions	D4 6.75	Mickey Mouse	D4 6.25	Tracksuit Manager	6.45
Collected Works	D4 8.95	Marauder	D2 5.50	The Games (Winter)	D1 6.95
Corruption Disk Only	11.95	Mad Mix (Pepsi)	D2 5.50	The Games (Summer)	D1 6.95
Captain Blood	D1 6.45	Motor Massacre	D1 5.50	Typhoon	D1 5.25
Command Performance	D5 9.90	Munsters	6.40	T-Wrecks	D1 5.50
Circus Game	D1 5.95	N. Mansell's Grand Prix	D4 6.95	Taito's Hits	D3 9.95
Dark Side	D1 6.50	Night Raider	D1 6.75	Total Eclipse	D1 6.45
Dragon Ninja	D1 6.45	Netherworld	D1 5.50	Techno Cop	D1 5.50
Double Dragon	6.50	Outrun	D1 6.50	Tiger Road	D1 6.25
Dynamic Duo	5.50	Operation Wolf	D1 5.40	Thunder Blade	D1 6.95
Dark Fusion	D3 5.50	Overlander	D2 5.25	Triv P. New Beg	D3 9.95
Daley Thompson	D1 6.50	Ocean Compilation	D5 9.95	Ten Mega Games	D1 9.95
Empire Strikes Back	D1 6.50	Platoon	D1 6.45	The Deep	D2 6.25
Eliminator	D1 5.50	Pac-Land	5.95	Turbo-Cup	D2 5.95
Exploding Fist +	5.00	Power Pyramids	5.95	Untouchable	D1 5.75
Echelon	D1 6.75	Par 3	D5 9.95	Victory Road	D1 5.25
Emlyn Hughes Soccer	D1 6.45	Pacmania	5.95	Virus	5.20
F16 Combat Pilot	D4 9.45	Pro Soccer	D2 6.00	Vindicator	5.25
Fist's & Throttles	D5 9.45	Pro Bmx	4.00	Whirligig	D2 5.15
F. Bruno's Big Box	D3 8.95	Pussy's Saga	D4 6.95	War Middle Earth	6.95
Football Manager II	D1 6.45	Rambo 3	D1 5.95	Wanderer 3D	D2 5.95
Football Dir. II 128	D5 13.95	Robo-cop	D1 5.95	Wec Le Mans	D1 5.95
Football Director	5.95	Roy of the Rovers	D1 5.45	10 Great Games II	D4 6.95
Fernandez Must Die	D2 6.75	Road Blasters	D1 6.75	1943	D2 6.25
Fox Fights Back	D2 6.00	Return of the Jedi	D1 6.45	4 x 4 Off Road Racing	6.75

Mail order only. Postage included Great Britain. EEC add 75p per item. Overseas add £1.50 per item. Fast Service.

Send cheque/PO to MEGASAVE Dept CR, 49H Sutherland St, Victoria, London SW1V 4JX

Please send for free list of new releases on Amstrad, MSX, Atari ST, Amiga, Commodore,

Spectrum and +3 disc. STATE WHICH LIST. Future League Ltd.

Please note new programs will be sent the day they are released.

D = +3 Disc
D1 = £9.05
D2 = £8.75
D3 = £12.50
D4 = £10.50
D5 = £13.45
D6 = £11.90

THE CRASH DIRECTORY

Yes folks, it's that time of the year again – it's The CRASH Review Index. The following index is a full list (with ratings etc) of all the games reviewed in Issues 48-59 of CRASH. Staple this to the previous years' index (in Issue 48) for the comprehensive run-down on all the games reviewed in the past five years of CRASH. Yet again, many thanks must go to IAN DOGETT of Kirton, Ipswich for compiling the massive index (your CRASH sub has been duly extended – so there's no excuse for the lack of an index for 1989!).

TITLE PRODUCER %age	Issue/Page	TITLE PRODUCER %age	Issue/Page
2-D Game Maker CRL 49%	59/49	Calling, The Visual Dimensions 68%	56/58
Ace 2 Cascade Games 62%	48/14	California Games US Gold 36%	49/27
Acheton Topologika 87%	53/47	Captain America GO! 36%	50/25
Action Force II Virgin Games 90%	52/12	Cerius Atlantis 70%	53/95
Afterburner Activision 86%	59/9	Challenge Of Iythus Creative Juices 73%	58/40
Agent X II Mastertronic 56%	48/170	Championship Sprint Electric Dreams 44%	51/100
Alien Syndrome ACE 90%	57/84	Clever & Smart Magic Bytes 45%	49/19
Alternative World Games Gremlin Graphics 85%	55/80	Cloud 99 Marlin Games 75%	52/40
Anamagon's Temple Mediandroid 39%	57/44	Combat School Ocean 93%	48/16
Anarchy Rack-It 77%	48/165	Combat Zone Alternative Software 43%	49/28
Andy Capp Mirrorsoft 73%	49/23	Compendium Gremlin Graphics 61%	49/97
Arctic Fox Electronic Arts 41%	55/20	Corruption Rainbird 85%	57/43
Arkanoid – Revenge Of Doh! Imagine 80%	51/106	Countdown To Doom Topologika 85%	52/40
ATF Digital Integration 89%	50/17	Crazy Cars Titus 65%	52/21
Artura Gremlin Graphics 38%	59/14	Crimebusters Players 80%	58/27
Ballbreaker II CRL 56%	52/16	Crosswise Firebird 69%	53/17
Barbarian Psychosis 81%	56/96	Cyberknights CRL 38%	53/20
Bard's Tale, The Electronic Arts 86%	55/55	Cybernoid Hewson 96%	51/12
Basket Master Imagine 73%	51/109	Cybernoid II Hewson 88%	57/86
Battleships Encore 78%	55/102	Daley Thompson's Olympic Challenge Ocean 91%	58/18
Battle Valley Rack-It 74%	56/98	Damned Forest, The Cult 41%	55/59
Beast, The Marlin Games 91%	59/111	Dan Dare II Virgin Games 74%	49/86
Bedlam GO! 75%	51/108	Dark Side Incentive 95%	54/76
Beyond The Ice Palace Elite 83%	53/84	Demon's Revenge Firebird 32%	51/107
Bionic Commando GO! 92%	53/18	Denizen Players 59%	52/83
Black Lamp Firebird 57%	51/11	Dervish The Power House 19%	52/86
Blitzkrieg CCS 90%	49/51	Desolator US Gold 60%	54/84
Blockbusters TV Games 46%	49/98	Deviants Players 66%	48/168
Blood Brothers Gremlin Graphics 85%	54/78	Devil's Hand, The Compass Software 72%	59/112
Blood Valley Gremlin Graphics 41%	51/18	Diamond Destiny 70%	56/23
BMX Kidz Firebird 69%	50/100	Disposable Heroes The Power House 22%	52/86
The Bobby Yazz Show Destiny 85%	57/18	Dr Jekyll and Mr Hyde The Essential Myth 79%	54/52
Boxing Manager Willysoft 86%	50/82	Double Agent Tartan Software 81%	57/44
Brainstorm Firebird 90%	52/18	Draconus Zeppelin Games 90%	58/91
Bravestarr GO! 46%	49/98	Dreadnoughts In Jutland Specsime 69%	51/50
Buggy Boy Elite 71%	53/89	Dream Warrior US Gold 31%	55/21
Cage Match Entertainment USA 15%	52/83	Droidz Silverbird 21%	56/95
		Dynatron Mission Mastertronic 71%	49/24

TITLE PRODUCER %age	Issue/Page
Earthlight Firebird 90%	53/10
Eliminator Alternative 34%	56/94
Empire Strikes Back, The Domark 90%	54/22
Energy Warrior MAD X 45%	50/100
Enlightenment – Druid II Firebird 68%	49/90
Enter At Your Risk Teenware 60%	53/49
Erik: Phantom Of The Opera Crisys 54%	48/12
European 5-A-Side Silverbird 56%	55/104
Eye Endurance Games 50%	48/12
Fairly Difficult Mission Zodiac Software 76%	55/57
Federation CRL 78%	51/44
Fernandez Must Die Imageworks 87%	58/93
Firefly Ocean/Special FX	50/12
Firetrap Electric Dreams 78%	49/14
First Past The Post Cult 32%	55/68
Flintstones, The Grandslam 62%	54/84
Flying Shark Firebird 85%	49/20
Football Frenzy Alternative Software 39%	50/80
Football Manager 2 Addictive Games 79%	54/20
Foxx Fights Back Imageworks 85%	58/24
Freedom Fighter The Power House 19%	53/21
Frightmare Cascade Games 57%	51/25
Frontline Zeppelin 50%	53/86
Fury, The Martech 72%	55/20
Galactic Games Activision 71%	49/87
Game Over II Dinamic 60%	58/17
Games: Winter Edition Epyx/US Gold 80%	56/20
Garfield The Edge 90%	50/18
Gary Lineker's Superstar Soccer Gremlin Graphics 52%	48/12
Gauntlet II US Gold 65%	49/94
GeeBee Air Rally Activision 66%	52/11
Gold, Silver, Bronze Epyx/US Gold 91%	57/28
Gothik Firebird 56%	52/25
Grand Prix Tennis MAD 23%	51/110
The Great Giana Sisters GO! 92%	55/12
Grid Iron Top Ten Hits 29%	48/169
Gryzor Ocean 49%	49/22
Guild Of Thieves Rainbird 90%	51/42
Gunfighter Atlantis 75%	58/27
GunsMoke GO! 54%	52/24
Gutz Ocean/Special FX 62%	53/13
Hercules – Slayer Of The Damned Gremlin Graphics 54%	54/82
Hopping Mad Elite 78%	55/82
Hot Shot Addictive Games 77%	56/93
Hunt For Red October Grandslam 77%	50/88
Ikari Warriors Elite 76%	51/104
IK + System 3 91%	49/88
Impact ASL 60%	51/101
Implosion Cascade Games 38%	48/14
Impossible Mission II Epyx/US Gold 84%	55/16
Inside Outing The Edge 82%	49/91
Intensity Firebird 91%	57/90
Jackal Konami 47%	48/164
Jade Stone, The Marlin Games 79%	53/48
Jester Quest Nebula Designs 66%	56/58
Jetbike Simulator Code Masters Plus 75%	50/101
Jinxter Rainbird 92%	51/43
Joe Blade II Players 90%	57/30
Karnov Electric Dreams 76%	52/88
Kemshu Cult 79%	55/105
Kikstart Mastertronic 77%	50/101
Kingdom Of Hamill Topologika 78%	53/49
Knightmare Activision 62%	49/18
Knight Orc Rainbird 92%	49/45
Krypton Factor, The TV Games 37%	50/20
Laser Squad Target Games 89%	59/103
Last Ninja 2 System 3 90%	59/188
Lazer Tag GO! 59%	53/12
Leader Board Par 3 US Gold 93%	57/14
Lee Enfield Is Space Ace Infogrames 49%	52/16
Live And Let Die Domark/Elite 71%	59/186
Los Angeles SWAT Entertainment USA 26%	50/99
Madballs Ocean 65%	50/94
Mad Mix Game US Gold 85%	58/18



TITLE PRODUCER %age Issue/Page

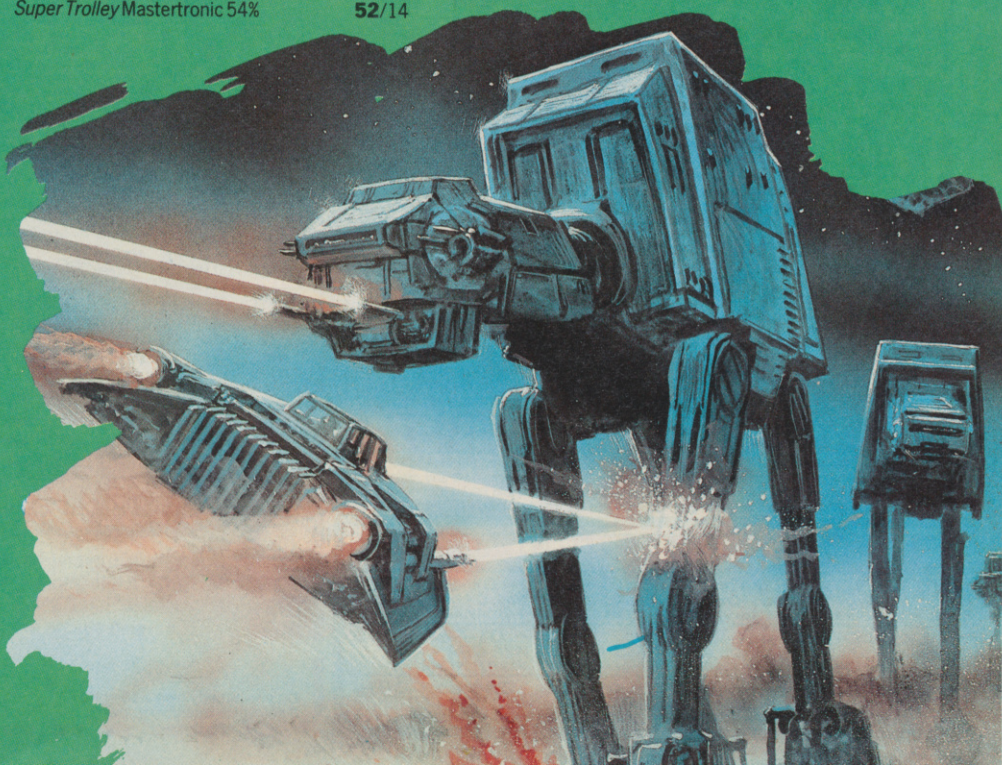
Magnetron Firebird 57%	51/24
Marauder Hewson 90%	55/22
Masters Of The Universe Gremlin Graphics 70%	49/99
Match Day II Ocean 91%	48/18
Mega-Apocalypse Martech 58%	52/24
Merlin Firebird 40%	50/99
Mickey Mouse Gremlin Graphics 90%	54/80
Microball Alternative Software 41%	50/96
Mindfighter Activision 69%	55/55
Mini-Putt Accolade/EA 73%	59/186
Monster Haggisoft 84%	52/39
Nigel Mansell's Grand Prix Martech 72%	50/11
Night Raider Gremlin Graphics 79%	55/79
Nihilist Electric Dreams 49%	48/162
1943 GO! 46%	57/87
19 Part One - Boot Camp Cascade 91%	56/14
Ninja Scooter Simulacra 70%	56/97
Northstar Gremlin Graphics 90%	50/24
Octan Silverbird 51%	55/103
Operation Wolf Ocean 91%	59/18
Out Of This World Reaktor 37%	49/96
Out Run US Gold 72%	49/22
Overkill Atlantis 39%	55/81
Overlander Elite 85%	56/12
Overlord CCS 34%	51/51
Pac-Mania Grand Slam 82%	59/9
Peter Beardsley International Football Grand Slam 22%	59/188
Phantom Club Ocean 55%	48/164
Philosophers Quest Topologika 85%	54/52
PHM Pegasus Electronic Arts 79%	50/23
Piggy Bug-Byte 7%	50/97
Pink Panther Gremlin Graphics 34%	57/24
Platoon Ocean 93%	50/90
Plus 3 Adventures Mastertronic 75%	56/58
POD Mastertronic 21%	51/111
Pogostick Olympics Silverbird 20%	55/15
Powerama The Power House 61%	54/21
Predator Activision 66%	51/100
Professional BMX Simulator Code Masters 73%	57/92
Pro Golf II Atlantis 30%	49/24
Prowler Mastertronic 14%	53/95
Psycho Pigs UXB US Gold 70%	53/96
Psycho Soldier Imagine 76%	49/86
Pulse Warrior Mastertronic 46%	58/23
Quest For The Golden Egg Cup Mastertronic 88%	56/56
Quest For The Poorly Snail Futuresoft 65%	58/40
Race Against Time Code Masters 79%	54/13
Rampage Activision 69%	48/13
Ramparts GO! 61%	52/17
Rastan Imagine 85%	51/20
Raven, The Eighth Day Software 84%	50/80
Ready, Steady, Go! Alternative 13%	55/102
Realm, The Cult 49%	55/58
Rentakill Rita Mastertronic 73% 73%	48/165
Rex Martech 82%	59/183
Ricochet Silverbird 33%	48/170
Riding The Rapids Players 55%	48/169
Roadblasters US Gold 84%	55/101
Roadwars Melbourne House 66%	50/13
RoboCop Ocean 92%	59/22
Rockford MAD X 57%	51/103
Rogue Mastertronic 63%	55/104
Rollaround Mastertronic 61%	50/95
Rolling Thunder US Gold 47%	50/89
Roy Of The Rovers Gremlin Graphics 47%	58/88
R-Type Electric Dreams 92%	59/26
Runestone Of Zaobab, The Eric Stewart 58%	59/113
Rygar US Gold 58%	48/19
Sabotage Zeppelin Games 53%	53/86
Salamander Konami 79%	49/90
Samurai Warrior Firebird 89%	57/13
Saracen Americana 15%	48/168
Savage Firebird 74%	59/190
Scraples Virgin Games 71%	49/26
Scumball Bulldog 81%	50/95
Shackled US Gold 72%	51/24

TITLE PRODUCER %age Issue/Page

Shanghai Karate Players 70%	53/94
Side Arms GO! 43%	51/18
Sidewalk Infogrames 87%	48/11
Skateboard Construction Set Players 87%	58/92
Skateboard Kidz Silverbird 68%	56/21
Skate Crazy Gremlin Graphics 83%	54/16
Skelvulyn Twine Eighth Day Software 83%	54/51
Slaine Martech 70%	48/161
Snookered Top Ten 59%	54/21
Soldier Of Light ACE 72%	54/75
Soldier Of Fortune Firebird 70%	57/25
Sophistry CRL 90%	52/84
Sorcerer Lord PSS 70%	49/50
Spore Bulldog 67%	51/110
Stalingrad CCS 90%	55/66
Star Paws Software Projects 77%	51/10
Star Pilot Silverbird 65%	48/171
Starring Charlie Chaplin US Gold 60%	53/20
Star Wars Domark 84%	48/163
STI Bug-Byte 80%	50/81
Stopball Mastertronic 17%	56/13
Street Fighter GO! 69%	53/12
Street Hassle Melbourne House 75%	49/26
Street Sports Basketball Epyx/US Gold 49%	54/85
Stunt Bike Simulator Silverbird 55%	55/103
Super Hang-On Electric Dreams 85%	48/11
Super Hero Code Masters 68%	58/26
Supersports Gremlin Graphics 79%	59/13
Super Stuntman Code Masters 53%	49/28
Super Trolley Mastertronic 54%	52/14

TITLE PRODUCER %age Issue/Page

Tanium Players 45%	52/14
Target; Renegade Imagine 90%	52/22
Teladon Destiny 49%	51/19
Terramex Quicksilver 80%	49/95
Tetris Mirrorsoft 77%	50/10
Thing! Players 73%	51/23
Thunder Blade US Gold 91%	59/184
Thunderbow/Sacred Scroll 60%	58/39
Time & Magick Mandarin 80%	55/56
Tour De Force Gremlin Graphics 66%	49/18
Train: Escape To Normandy, The Electronic Arts 79%	57/25
T-Wrecks (alias The Muncher) Gremlin Graphics 80%	56/22
Typhoon Imagine 67%	59/187
2088 Zeppelin 40%	58/23
Vectorball MAD 58%	56/94
Venom Strikes Back Gremlin Graphics 91%	53/90
Vindicator, The Imagine 80%	57/20
Virus Firebird 77%	55/14
Virus SAEC 65%	53/49
Vixen Martech 60%	54/83
Where Time Stood Still (1.28K) Ocean 94%	54/14
Winter Olympiad 88 Tynesoft 44%	49/96
Wizard Warz GO! 70%	54/82
Xanthus Players 60%	48/171
Xarax Firebird 52%	51/102
Yeti Destiny 61%	51/17
Zolyx Firebird 14%	51/23
Ultimate: The Collected Works US Gold 97%	56/86



520ST-FM SUPER PACK



The Atari Super Pack is ideal for you if you want to get off to a flying start with the best in entertainment software. The Pack includes a 520ST-FM with 1Mb RAM, a built-in 1Mb disk drive, over £450 of top games and a joystick. If you buy the Super Pack at Silica Shop, we will add our own ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for details.

£399
INCLUDING VAT

With SM124 mono monitor: £498 ^{INC VAT} With SC1224 colour monitor: £698 ^{INC VAT}

1Mb DISK DRIVE £450 OF SOFTWARE

ARCADE GAMES

Arkanoid II	Imagine	£19.95
Beyond The Ice Palace	Elite	£19.95
Black Lamp	Firebird	£19.95
Buggy Boy	Elite	£19.95
Chopper X	Mastertronic	£9.99
Ikari Warriors	Elite	£14.95
Marble Madness	Electronic Arts	£24.95
Quadrailen	Logotron	£19.95
Ranarama	Hewson Consultants	£19.95
Return To Genesis	Firebird	£19.95
Roadwars	Melbourne House	£19.95
Starquake	Mandarin	£19.95
Test Drive	Electronic Arts	£24.95
Thrust	Firebird	£9.95
Thundercats	Elite	£19.95
Wizball	Ocean	£19.95
Xenon	Melbourne House	£19.95
Zynaps	Hewson Consultants	£19.99

SPORTS SIMULATIONS

Eddie Edwards Super Ski	Elite	£19.95
Seconds Out	Tynesoft	£19.95
Summer Olympiad '88	Tynesoft	£19.95

PRODUCTIVITY SOFTWARE

Organiser	Triangle Publishing	£49.95
-----------	---------------------	--------

JOYSTICK

Atari CX40 Joystick	Atari Corp	£4.99
---------------------	------------	-------

FREE ATARI BUNDLE VALUE: £458.97

ATARI ST ST COMPUTERS

The range of Atari ST computers offers something for everyone. From the games enthusiast who wants the challenge of the very best in arcade action, to the businessman who wants to make financial forecasts or faultless presentations. The ST offers high quality graphics, sound and speed for the gamer, whilst providing a fast, user friendly and affordable solution to business. The ST is now firmly established in the home environment and boasts a wealth of users in education, local government, television, and a variety of different businesses. Software for the range stretches to cover applications as diverse as ENTERTAINMENT, ACCOUNTS, ART, COMMUNICATIONS, COMPUTER AIDED DESIGN, DATABASES, DESKTOP PUBLISHING, EDUCATION, MUSIC, PROGRAMMING, SPREADSHEETS, WORD PROCESSING and more. For a full list of the software available, as well as details of the ST range, complete and return the coupon below.

All prices correct at the time of going to press. E&OE

520ST-FM EXPLORER PACK WITH BUILT-IN 1Mb DISK DRIVE



The value for money offered by the Atari ST range is reflected in the Explorer Pack featuring the 520ST-FM computer with 512K RAM. The 520ST-FM computer now comes with a built-in 1 Mb double sided disk drive as well as a free mouse controller and a built-in TV modulator. The new 520ST-FM Explorer Pack includes the 520ST-FM computer, the arcade game Ranarama, a tutorial program and some useful desktop accessories. In addition, if you buy the Explorer Pack from Silica, we will give you the Silica ST Starter Kit worth over £200, FREE OF CHARGE. Return the coupon for details of our Starter Kit and of the full ST range.

£260
ONLY £2.51 PER WEEK
RETURN COUPON FOR DETAILS
+ VAT = £299

+ SM124 mono monitor: £398 ^{INC VAT} + SC1224 colour monitor: £598 ^{INC VAT}

1040ST-FM PROFESSIONAL PACK

NOW WITH TV MODULATOR

For the serious home user and the small business, we are pleased to announce a new package based around the 1040ST-FM. The 1040ST-FM has 1Mbyte RAM and a 1Mbyte built-in disk drive. In addition, the 1040ST-FM now comes with a TV modulator built-in. (The previously available 1040ST-F was designed for use with a monitor only and did not come with a modulator.) This modulator allows the 1040ST-F to be plugged directly into any domestic TV set, and comes complete with a lead to allow you to do so. The new 'Professional Pack' from Silica includes the new 1040ST-FM with modulator plus four high quality software packages including a spreadsheet, database, word processor and programming language. This 'Professional Pack' software will enable you to get straight down to business with your new computer. In addition to this software (worth £384.84), if you buy the Professional Pack from Silica Shop, you will also receive the Silica ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for further information.

£499
INCLUDING VAT

With SM124 mono monitor: £598 ^{INC VAT}

With SC1224 colour monitor: £798 ^{INC VAT}



ATARI 1040ST-FM	(Computer)	£499.99
VIP PROFESSIONAL	(Spreadsheet)	£149.95
MICROSOFT WRITE	(Word Processor)	£149.95
SUPERBASE PERSONAL	(Database)	£29.95
BASIC DISK & MANUAL	(Language)	£24.98

NORMAL RRP: £884.82

LESS DISCOUNT: -£385.82

PROFESSIONAL PACK PRICE: £499.00

2Mb & 4Mb MEGA ST

The MEGA ST computers are styled as lightweight keyboard with a separate CPU, connected by a coiled telephone style cable. There are two versions of the MEGA ST, one with 2Mbytes of RAM and the other with 4Mbytes. Each version has a 1Mbyte double sided disk drive built-in to the CPU unit. The MEGA ST's do not come with modulator built-in and must therefore be used with a monitor. With every MEGA ST purchased, we will add the 'Professional Pack' software (worth £384.83) detailed above, plus the Silica ST Starter Kit (worth over £200) both Free Of Charge. Return the coupon for further details.

2Mb MEGA ST

£899 ^{INC VAT}

+ mono monitor = £998

+ colour monitor = £1198

4Mb MEGA ST

£1199 ^{INC VAT}

+ mono monitor = £1298

+ colour monitor = £1498



DTP PageStream £149 ^{+VAT} = £171.35

Desktop Publishing (DTP) is one of the fastest growing applications for personal computers. We are pleased to announce a powerful low cost package for the Atari ST called PageStream. PageStream costs only £149 (+VAT=£171.35) and, because it works with an Atari 1040ST and a Silica SP-180A printer, you can be up and running with a complete system for less than £1000. Some of the features of PageStream are listed to the right. If you would like further information on this program, complete and return the coupon below, ticking the 'DTP' box in the corner.

- TEXT-FLOW AROUND GRAPHICS
- ROTATION OF TEXT & GRAPHICS
- SLANT OR TWIST ANY OBJECT
- POSTSCRIPT COMPATIBLE
- TAG FUNCTION
- AUTO/MANUAL KERNING & HYPHENATION
- GROUPING OF OBJECTS

DO YOU OWN AN ATARI ST?

If you already own an Atari ST computer and would like to be registered on our mailing list as an ST user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist ST service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111

1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

LONDON 01-580 4000

52 Tottenham Court Road, London, W1P 0BA

OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

LONDON 01-629 1234 ext 3914

Selfridges (1st floor), Oxford Street, London, W1A 1AB

OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

WHY SILICA SHOP?

Before you decide when to buy your new Atari ST computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer and expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Atari ST related products in the UK, a full time Atari ST specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years with an annual turnover in excess of £8 million and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. But don't just take our word for it. Complete and return the coupon below for our latest literature and begin to experience the Silica Shop specialist Atari service.

SILICA STARTER KIT: Worth over £200, FREE with every Atari ST computer bought from Silica.

PROFESSIONAL PACK: Free business software with 1040ST-FM and MEGA ST's bought from Silica.

DEDICATED SERVICING: 7 full-time Atari trained staff with years of experience on Atari servicing.

THE FULL STOCK RANGE: All of your Atari requirements from one place.

AFTER SALES SUPPORT: The staff at Silica are dedicated to help you get the best from your ST.

FREE CATALOGUES: Mailed direct to your home as soon as we print them, featuring offers as well as all of the new releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped within the UK mainland.

PRICE MATCH PROMISE: We will match competitors on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Atari technical experts always at your service.

FREE SILICA STARTER KIT WORTH OVER £200

WITH EVERY ST - RETURN COUPON FOR DETAILS
ALL PRICES QUOTED INCLUDE FREE UK DELIVERY

To: Silica Shop Ltd, Dept CRASH 0289, 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

PLEASE SEND FREE LITERATURE ON THE ATARI ST

Mr/Mrs/Ms: Initials: Surname:

Address:

.....

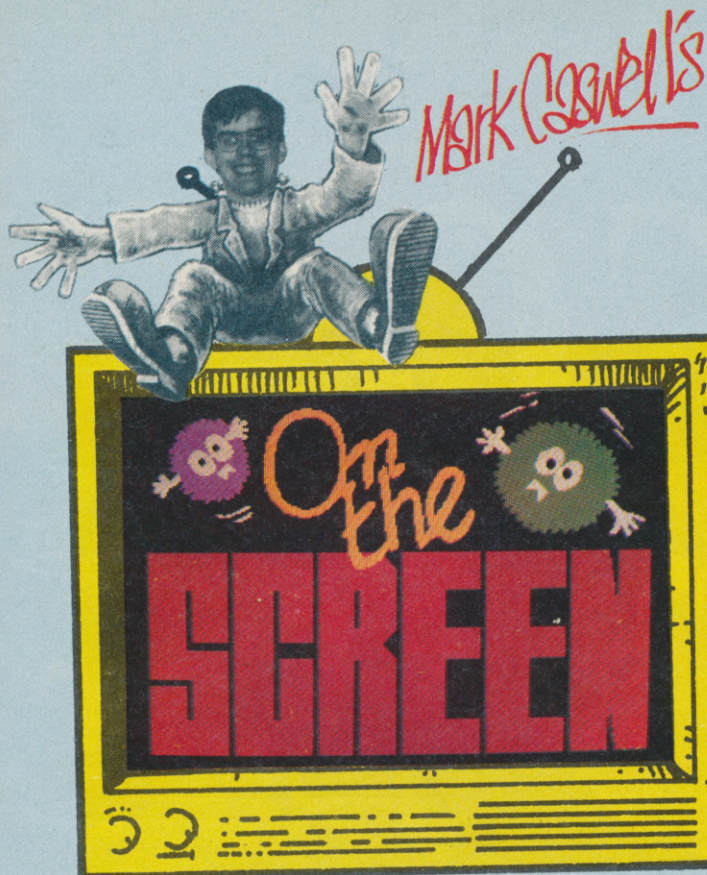
.....

Postcode:

Do you already own a computer

If so, which one do you own?

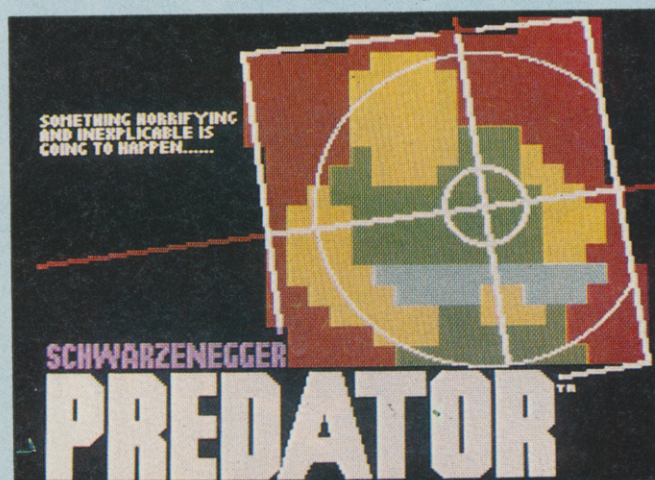
DTP ☐



Borag Thungg earthlets, as a certain green skinned alien says, how were your Yuletide festivities? Mine were great, lots of turkey and presents, boring TV programmes and even more boring relatives who show up at Christmas time. Did you get all the presents you wanted? I'll tell you the thing I hate most, getting a present that needs batteries; you always find that they aren't supplied and you have to wait until after the Christmas Holiday before you can get any. I think next year I'll buy a van load of batteries prior to Christmas and sell them on Christmas Day, I bet I would make a heck of a profit. So what wondrous delights do I have to tickle your eyeballs with this month? Batman makes another appearance, a very nice piccy of the ace arcade mega hit *Afterburner* zooms in, and after the trouble we had with Mr RoboCop last month, Mr Schwarzenegger yomps into the office, mistakes Phil for the alien nasty he is hunting, chews Nick's desk to pieces and wanders off again. It really has been one of those months...



▲ Is it a bird? Is it that costumed nut who wanders around in a blue leotard and red longjohns? Nope, it's a Grumman F-14 Tomcat, and it's the star of the new Activision game *Afterburner* (86%, Issue 59). P Hetherington from Enfield in Middlesex is obviously a fan of the arcade coin-op.



▲ Aaagh! Look out, Arnie's about! It was bad enough having RoboCop rampaging around the office last month. Now we have Austria's answer to a one-man army stomping into the office and ordering everyone about (though I for one won't argue with him). Thanks again go to P Hetherington.



▲ Batman is one of my favourite comic book characters, and he appears yet again in the hallowed halls of On The Screen. Mikkel Helbig Hansen, from Denmark, sent in this masterpiece of Batman action taken from the classic comic novel *The Dark Knight Returns*. And to answer your query Mikkel, if I had more screen shots from people in Scandinavian countries I would happily print them.

That's the end of another fun-packed episode of On The Screen, will Batman catch his villain? Will Arnie bring down the F-14 with the awesome arsenal at his disposal? Who knows, or really cares? My plea in the Christmas issue for more colour screens seems to have paid off; the OTS pages now look much brighter and fresher with a liberal splash of colour (although not too many 'hot' screens). So please keep up the good work because if you're the lucky first prize winner you will receive £40 worth of your favourite games, and the rest on the page earn their senders £10 worth of software. How to win a fabulous prize? - it's very simple, just design a screen and place it on either cassette or disk. Then pop it into an envelope (remembering the SAE if you want your work returned), and send it to the usual address. So don't be a grexnix, send all your material to MARK 'FRANCIS BACON' CASWELL, On The Screen, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB. Splundig Vur Thingie!

CECCO'S LOG

Stardate: 15 November 1988

A couple of incredibly boring programmer people have suggested that I ought to talk more about the technical aspects of programming *Stormlord*, rather than waffling on about things in general. Well, as I aim to please everybody, here goes . . .

A six t-state enhancement to the scroll routine has allowed a sillisecond (0.0000000000000003 sec) more raster time in which to process the omni-inertial, fractal based, sprite by-pass counter-break in the main control segment. As all intelligent people know, the counter-break method of coding really does need a zeroified two millisecond output pulse to even out the rough Zen

▼ Raf Cecco on the battlements



frequencies generated by the processor . . . (All queries about this should be addressed to Andrew 'the programmers see me as a friend' Hewson.)

Stardate: 18 November 1988

I am informed that Nick and I (it's always Nick and I) have been invited up to CRASH Towers in far away Ludlow. I think it'll be nice to see that lot for once.

Stardate: 21 November 1988

I've started coding up the part of *Stormlord* that will handle all the object

▼ 'Deadline? What deadline?'



manipulation in the game. I only have a rough idea exactly what sort of objects will be in the final game, but that isn't really important at the moment. All that needs to be working is a system whereby object A can be picked up or swapped with object B, and object A can be used



▲ Raf Cecco and an unknown pedestrian pose beside a Ludlow Castle cannon (it's me, it's me – Ed)

to trigger an event like removing object B from the game man. A bit later on, I might, for example, decide that object A is a hammer and object B is a bottle. (He's getting a bit technical again – Ed.)

Stardate: 2 December 1988

At the speed of light in Nick's Metro, we set off from Reading for the CRASH offices in Ludlow. Having been assigned as chief navigator, I scrutinize the map closely and tell Nick to go due up and left a bit for about 150 miles.

After a couple of hours into the journey we're feeling very bored and tired with numb bottoms and dead legs. To bring a little cheer to our uncomfortable predicament, I invent a game. The

objective is to try and lock the inertia seat belts by violently jerking our chests forward. Nick had a distinct advantage as he could hold onto the steering wheel for extra leverage. This was all jolly good fun, but we decided to stop when the internal bleeding started. (Please don't try things at home, folks. Programmers are a special breed of person – Ed.)

On arrival in Ludlow we pick up graphics guy Hugh 'Err, yea, hi' Binns from Ludlow station (platform) and make our way to CRASH Towers. We all barge up the sixty-billion stairs to the CRASH office. On the door is pinned a vehement (RCLWD) No Smoking sign (I doubt that anyone who smokes could actually climb all those stairs).

We all barge in. You know those sort of plush offices with Habitat furniture and glamorous, model-girl secretaries and receptionists? Well, the CRASH office is nothing like that. Instead we are greeted by good old Dominic 'insert superlatives here' Handy, who promptly barges us back down all those stairs to grab some lunch.

I comment on how 'quaint' Ludlow is, as this seems to wind Dominic up no end (quaint, quaint, quaint, QUAIN'T!... Ha ha!). Negotiating the ingenious 'free for all' road junctions that exist in Ludlow, we make our way to big bad Dom's favourite (and Ludlow's only) restaurant. As we begin to order the most expensive things on the menu, Dom's credit card squeals in dismay. (But what do you expect from programmers who've become accustomed to extremely luxurious and glamorous lifestyles?)

After lunch it was back to CRASH Towers to show off *Stormlord* and take a few more silly photographs for the Log. Someone had the ingenious idea of popping over to Ludlow Castle and taking a picture of me being thrown off a very high wall by Dominic and his burly min-



▲ Raf Cecco, the Ed, Hugh Binns, Nick Jones

ders. Luckily they didn't get a photo of me landing on my backside. (What more Dominic? Raf being fired out of a cannon? Raf leaping under a bus? Raf getting his own back – snarl!)

Stardate: 5 December 1988

It's time, I think, to put the 'front end' of the game in. This is the part of the program that you see as soon as it has loaded. I've opted for a very decorative mixture of a lovely character set drawn by Hugh and a smattering of some of the graphics that are in the game. I think the end result looks very pretty and effective. To this I have added a credits screen in which I mention everybody that has contributed to the program in terms of graphics or ideas.

Stardate: 19 December 1988

It's eight in the evening and Andrew 'Kind at heart' Hewson has popped over to pick up (for a nominal charge) one of the kittens for his kids at Christmas (isn't that nice?). (No, not really. You're not supposed to give pets for Christmas... But seeing as it's Andrew... – Ed.)

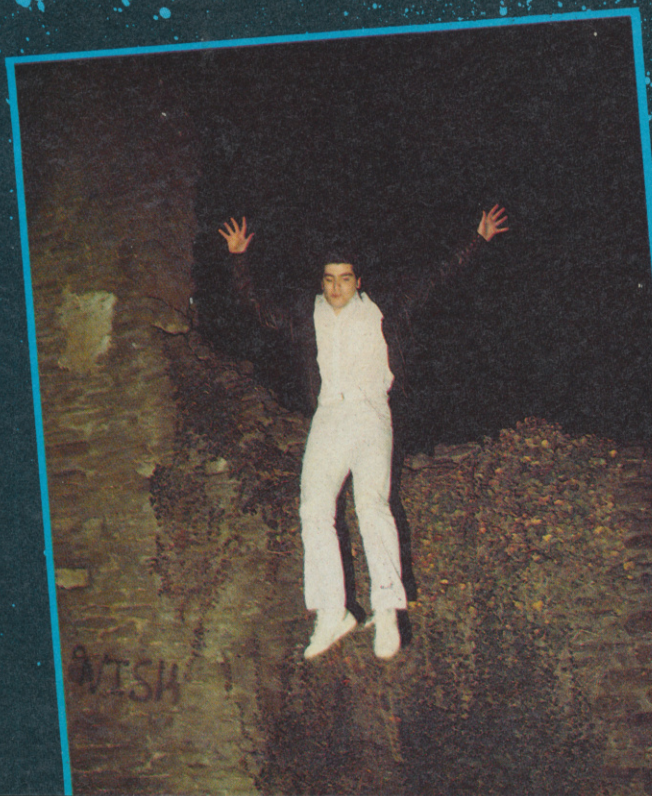
Stardate: 22 December 1988

A disk full of graphics arrives from Hugh. As it turns out, most of the stuff is for Nick and the C64 version of *Stormlord*. As well as more general background graphics, Hugh has started designing the objects that will be used to complete the adventures in *Stormlord*. He has begun with the obvious ones like keys, axes and knives – the more cryptic ones will follow later.

It's pretty much all downhill now as far as programming *Stormlord* goes. All the hard stuff is more or less out of the way. I can now concentrate on putting the actual 'game' together as opposed to just mucking about with the technical aspects of the program.

Apparently this could conceivably be the last log as *Stormlord* is pretty near to completion (that's what you think – Ed). If it is, then may I wish you my fondest regards and I hope you've enjoyed this little insight into a programmer's life (awful isn't it?). *Stormlord*, in all its majestic, super-smooth, scrolling glory (sorry), will be available around February time.

(Ha, ha. Revenge is mine. We'll just have to find out about a programmer's Christmas. So just one more month? Please, pretty please, Raf – Ed.)



◀ Hewson's Action Man making a prat of himself again

OLDIES UNLIMITED!

What? Spent all your Christmas money already? Well, never fear, the golden oldie himself, **PHIL KING**, takes you on a tour of the latest budget-price rereleases . . .

THE GROWING PAINS OF ADRIAN MOLE

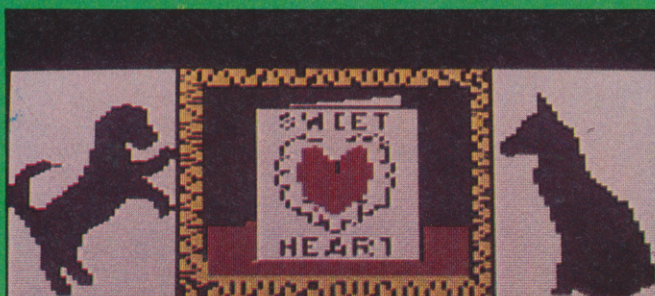
Producer: Ricochet
Price: £1.99
Original rating: 88%

The spotty adolescent with a passion for poetry and his beloved 'treacle-haired, dog-eyed' Pandora suffers yet more teenage angst in this Level 9 adventure. First released in April 1987 by Mosaic/Virgin it follows the format of the first Sue Townsend inspired game, *The Secret Diary Of Adrian Mole*. The tragicomedy of Mole family life is represented in diary form, with

the player asked to make decisions for Adrian from time to time. Choices are limited to one of three options.

Adrian's objective is to be 100% popular with friends and family—an impossible quest you might think and certainly Adrian's intended good deeds have an amazing tendency to turn out the wrong way. If you're a fan of the books and/or TV series, this contains similar humour, some of it taken directly from the books, and some of it brand new material. A good budget buy.

Overall 82%



Pandora and I put the remaining copies of *The Voice of Youth* in her attic. Her parents wanted to throw them away, but they will be a valuable historic record in years to come.

Monday February 8th FULL MOON. I, Adrian Mole, score 38 percent, which makes me a middling thicket.

FIGHTER PILOT

Producer: Silverbird
Price: £1.99
Original rating: 86%

The British answer to MicroProse brought out this classic simulation in early 1984. Reviewed in Issue 2 it proved to be much harder and more realistic than the American firm's *F-15 Strike Eagle*.

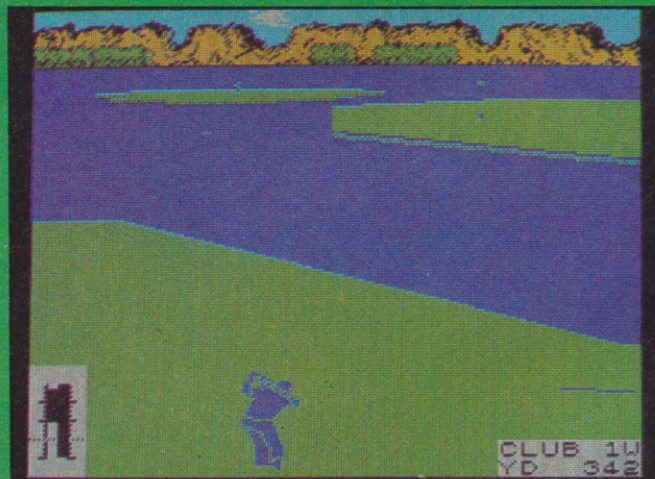
As the title's fighter pilot, you're charged with protecting four bases from enemy bombers. Armed only with machine guns you must use your radar map to plot interceptions. The

main view is a standard, out-of-the-cockpit 3-D. The standard array of instruments are provided, presented with excellent clarity.

Options allow the practise of all aspects of the game; landing (very difficult), air-to-air combat, and flying (no enemies). In addition you can select blind landings, crosswinds, turbulence and the skill levels of enemy pilots.

Even though it's quite old now, *Fighter Pilot* is a competent and complex flight sim which is worth another look at the new budget price.

Overall 76%



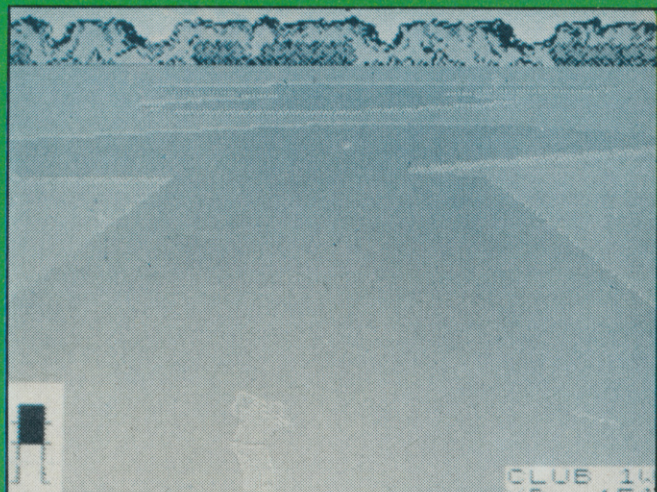
LEADER BOARD

Producer: Kixx
Price: £2.99
Original rating: 80%

After several disappointing attempts at golf simulations, *Leader Board*'s arrival April 1987 was all the more impressive. Undoubtedly the best of the genre, one of its main assets is the effective first-person, 3-D perspective view of

each hole, with a new view created from wherever the ball lands. The game also contains four different courses which can be played in any order by up to four players. One of three skill levels can be selected for each player, allowing beginners to compete with experts.

Each player has fourteen clubs at his disposal, ranging from the hard-hitting woods to the essential putter. After selecting the appropriate club, the



shot is aimed simply by placing the cursor in the desired direction. The key to the game is in the hitting of the ball, however. You start your swing by pressing fire, a power meter then rises until you press fire again to set the correct percentage. A second, 'snap' meter then starts rising, this sets whether the ball is hit straight, hooked or sliced, fire must be pressed quickly and accurately to get the right one. (On Novice level balls are automatically hit straight.) The

ball can also be sent off course by the wind on the professional skill level. If the ball lands in the water, a stroke is forfeited.

After almost two years *Leader Board* is still the top golf sim and a great buy at the new low price, although hardened golf fans might be more interested in the *Leader Board Par 3* (93%, Issue 57) compilation of *Leader Board*, *Leader Board Tournament* and *World Class Leaderboard*.

Overall 83%



SAI COMBAT

Producer: Silverbird

Price: £1.99

Original rating: 81%

This martial arts beat-'em-up followed a long line of similar games when it was released by Mirrorsoft in May 1986. Its unique feature was that



the fighters were armed with sai sticks.

As in *Way Of The Exploding Fist* this beat-'em-up takes place over several levels in which the player tries to bash either a computer or human opponent. Each player has six-

teen different moves to use, accessed in the typical beat-'em-up fashion, namely combinations of directions and fire.

Animation of the fighters is very good, although the background never changes. The computer opponents are fairly intelligent and tough to beat, but eventually bashing fighter after fighter (all identical) gets more

than a touch monotonous. Nevertheless, *Sai Combat* is a well-implemented, no-nonsense combat game which is a good buy if you haven't got a decent martial arts beat-'em-up in your software collection.

Overall 72%



DYNAMITE DAN

Producer: Silverbird

Price: £1.99

Original rating: 94%

Rod Bowkett's masterpiece (included in the CRASH All Time Greats booklet, Issue 57) first appeared back in July 1985. Over three years later it still ranks as one of the Spectrum's most playable games.

The action takes place inside a vast mansion, inhabited by many strange creatures. Dan's girlfriend has been locked in a massive safe inside the house. The only way to free her is by collecting eight sticks of dynamite to blow the safe door open.

The 48-screen mansion contains many bizarre features, such as tightropes, teleports and even trampolines to add extra spring to Dan's jumps. Contact with nasties or long falls reduces Dan's energy, but it can be topped up by eating the food which is scattered around the house.

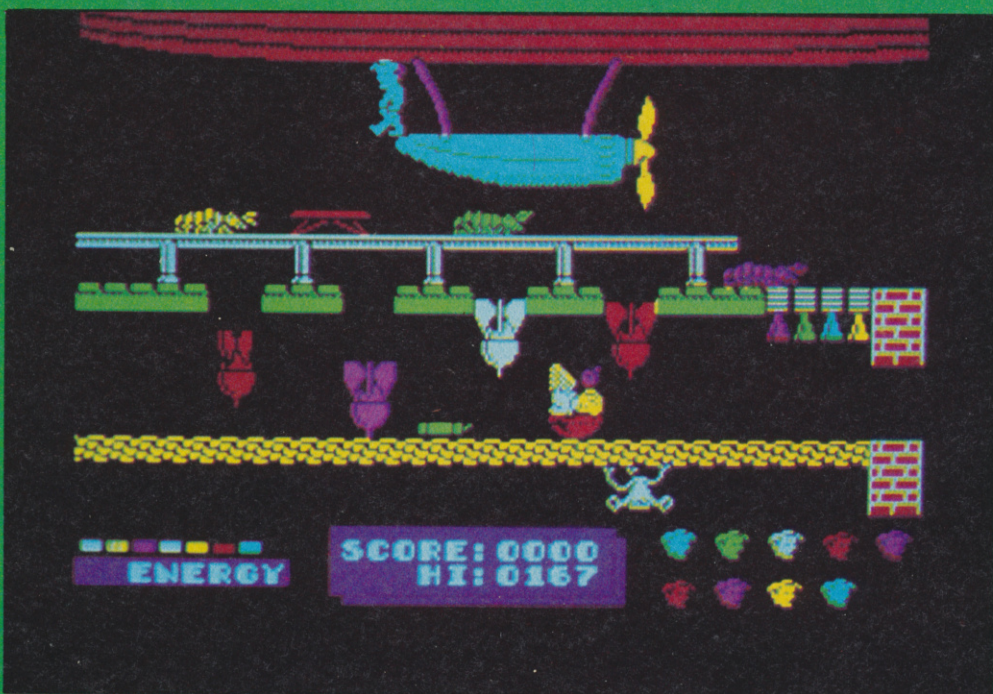
Colour is used extremely well, as is sound with different

tunelets for collecting various objects. But what really makes *Dynamite Dan* a great game is its sheer playability which keeps

you glued to the screen for hours. Now at a measly two quid it represents superb value for money—if you missed it first time

around, you can't afford to miss it now.

Overall 92%

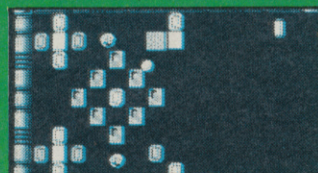


KRAKOUT

Producer: Kixx
Price: £2.99
Original rating: 46%

This *Breakout* variant has dated very little – it's still as awful as when we first reviewed it in May 1987.

The player controls a bat to hit the ball which bounces around the play area, destroying coloured bricks. However, instead of the bat being at the base of the screen (as in most *Breakout*-type games), it's at the right-hand-side and is moved vertically to stop the ball leaving the screen. Some of the blocks need several hits to be destroyed, while others reveal a special letter, which if hit, activates a special feature. These include a double bat, an expanded bat and



glue to make the ball stick to the bat.

Despite some useful options to change the speeds of the bat and ball, *Krakout* is severely lacking in addictive qualities – the layout of the screens is unimaginative and boredom soon sets in. At only two quid less than its original price (£4.99) it isn't recommended.

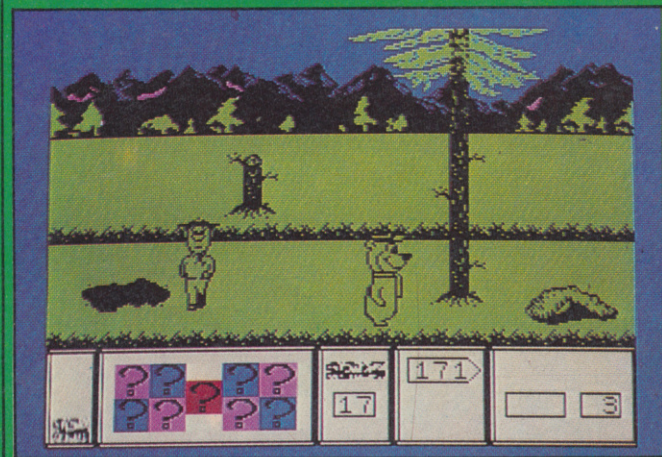
Overall 37%

YOGI BEAR

Producer: Alternate
Price: £1.99
Original rating: 62%

Jellystone park's famous ursine resident, so smart he probably even knows what 'ursine' means, starred in his own *Piranha* computer game in December 1987.

Yogi's sidekick Boo Boo has been kidnapped and Yogi must find him before it's time to hibernate. Jellystone Park is a



WAY OF THE TIGER

Producer: Kixx
Price: £2.99
Original rating: 93%

Gremlin's epic beat-'em-up was originally released in May 1986, and based on the solo-roleplaying books of the same name.

The game uses a strange 'triple scroll' effect to display the horizontally-scrolling play area. The background is split into three layers: the front layer is where the main action happens, while background effects like birds flying occur in the other two layers. This ingenious technique complements the



varied gameplay.

As a Ninja student, you are faced with three mammoth tests of skill by your Master: unarmed combat, pole fighting, and

dangerous place, with all manner of obstacles for Yogi to jump over or duck under, but there's plenty of snacks to grab too. If Yogi manages to reach the stepping stones to Boo Boo's prison, he must take the correct route to rescue his pint-sized friend.

Although the characters in the game look great, the 'cardboard cut-out' 3-D is confusing, with dodgy collision detection making it almost unplayable. For Yogi fans only.

Overall 48%

Samurai sword-fighting. The many martial arts moves at your fighter's disposal are accessed in typical beat-'em-up style. Only by defeating all the challengers in all three levels are you elevated to the elusive status of Ninja.

All the graphics are very detailed and beautifully animated, creating a wonderful atmosphere in which the excellent beat-'em-up takes place. This is a piece of software of the highest quality and a great buy at the new low price.

Overall 88%



NIGHT GUNNER

Producer: Silverbird
Price: £1.99
Original rating: 91%

Another old Digital Integration classic is rolled out of the hangar doors. This was first reviewed in Issue 3 where it was Game Of The Month – CRASH Smashes had yet to be invented.

The game has you as the gunner and bombardier of a WWII Lancaster. There's thirty missions in all, each divided into three sections. In the two gunner sections you're defending the plane on its journey to, or from, the target area. Enemy fighters appear as specks in the distance, then coming sweeping in to attack, machine guns flash-

BIGGLES

Producer: Silverbird
Price: £1.99
Original rating: 63%

Timed to coincide with the release of the movie the game was hyped to the skies, but sadly the actual game couldn't live up to it back in July 1986.

WWI flying ace Biggles has a 'time twin' living in the 1980s, called Jim. Back in 1917, the Germans have developed an awesome 'sound weapon' to win the war. Jim is 'warped' back in time to 1917 in order to help Biggles destroy the sound weapon.

Biggles consists of two separate games. The first has three sections, beginning with Biggles flying over enemy territory. The next section sees him and Jim warped back to the 1980s, running across London rooftops. The final section has them fighting German guards back in 1917. The other game, on the flip side of the tape, is essentially a flight simulator with the added objective of rescuing Biggles' friends.

Although disappointing at the time, *Biggles* now represents a big game for just two quid.

Overall 68%

ing. A gunsight is moved around the screen to intercept them, fail and damage builds up – sometimes jamming the gunsight!

When you arrive at the target you start your attack. Missions alternate between high-level bombing strikes (looking down on the scrolling target area) and low-level rocket attacks (flying into the screen and diving down to attack targets).

A true measure of a great game is how it stands up to the ravages of time and *Night Gunner* has certainly aged well. The sheer amount of missions, the variety of gameplay and toughness make this a formidable challenge which should keep you playing for ages. If you haven't already got it – get it now!

Overall 91%

CAULDRON II

Producer: Silverbird
Price: £1.99
Original rating: 91%

In the original *Cauldron*, the player controlled a witch fighting the evil Pumpking. In the sequel, you control a pumpkin battling against the evil witch!

The pumpkin's objective is a magic broomstick hidden in a castle populated by objects magically animated by the witch

to stop intruders. Five objects hidden in the castle must also be collected and used at the right places in the game to make progress.

As in the prequel, graphics are very colourful and well-animated without too much clash. Progress is again very difficult, but excellent presentation inspires you to keep playing. 128 screens of colourful, playable action seems very good value for the budget price.

Overall 87%

Nick Roberts's PLAYING TIPS



Did you hear the one about the Irish man and the banana? No, neither did I! Oh, sorry about that, I had a sudden attack of wit. It must have been the news from the GCSE examining board that they had dropped a right clanger on my English Language results, their computer made all Cs into Ds! You can't trust anyone these days. Anyway, it shut the rest of the CRASH team up - when I said I'd got a D they laughed. It's all sorted out now, though.

Tips this month are really booming, there is a solution to *Samurai Warrior*; Cheat Mode Motel; Yvonne down in art has done a brilliant map of *Last Ninja 2* to go along with the solution, and the Howdon Hackers and Tefal Men have been busy with plenty of POKES to see you through February.

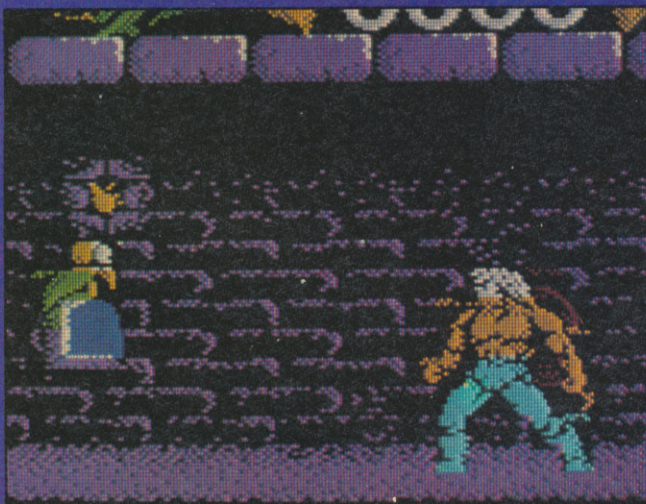
Now to set a challenge. How about attempting to make a 3-D model of Incentive's *Total Eclipse*? If you remember, back in Lloyd's 32-page Tip Special a 3-D map was printed of *Dragon's Lair 2*, if you could draw it like that, in 2-D with little cut and paste tabs all over it, I'll choose the best one and you're sure to get a prize. So there's something to keep you occupied.

liked to quickly get the big man over the edge and complete the level? Well now you can.

First, jump-kick in the direction of the drop so you have your back to the boss. When he comes near back-kick him. He should be stunned, but still upright. Quickly turn around and grab him. He will now be in a kneeling position. Knee him once just to make sure and then do a back-kick. He should go flying over your shoulder and, providing you are close enough, down the drop. (occupant: **Chris Dand**)

CHEAT MODE MOTEL

It's time once again to open the doors on the Cheat Mode Motel and see who's staying this month. Well, we have one bloke who tends to get really *Savage* if he doesn't get his breakfast on time, and the *Mario Brothers* have got a twin suite all to themselves. Finally someone called *Renegade* is staying for the second time. So there's plenty going on in the Cheat Mode Motel.



SAVAGE

The codewords for the later levels are SABATTA for Level 2 and FERGUS for Level 3. The

programmers have made a mistake in the program as on completing level 1 the password is spelt SABBATTA! (occupant: **Wai Sing Man**)

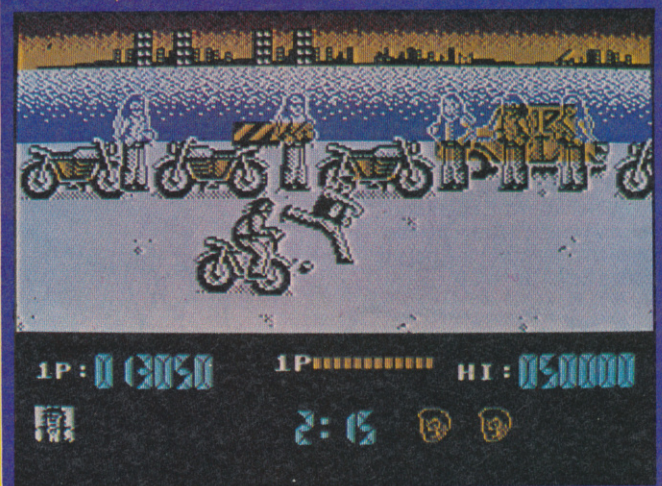
MARIO BROS

When the 128K game has started press BREAK, DELETE or EXTEND MODE and you can go to any phase you want. (occupant: **Stuart Hodge**)



RENEGADE

This is a different cheat from the one already printed. Apparently there is an extra move not mentioned in the instruction booklet! Have you ever been stuck between a boss and a drop, and would have



NINJA KNOWLEDGE

Here, as promised, is the solution to all six levels of System 3's brilliant *Last Ninja 2*. Now I don't want to spoil the game for anyone – and get a sack full of complaints to Lloyd – so if you want to complete the game on your own **DO NOT READ ON**, resist temptation and just say 'No'!

Right, now all those upright, arcade adventurers have gone, all us unscrupulous, and stuck, players can thank Jason Richardson of Wincanton for his tips, which win him this month's £40 of software.

Level 1

Go behind the curtain and punch the box which flashed as you entered. Return to the first room and fall down the open trap door, which will put you in a room with a key in it: pick this up and leave.

On the next screen leave by the bottom to find a room with a box of shurikens, take them. Go through the gap in the wall and you'll see the knife juggler, get past him and into the next room. Throw a shuriken at the man here and pick up the map, then climb the wall bars and leave by the left of the screen. Next, jump gaps and pick up pole, then jump back into the last room. Walk backwards onto the wall

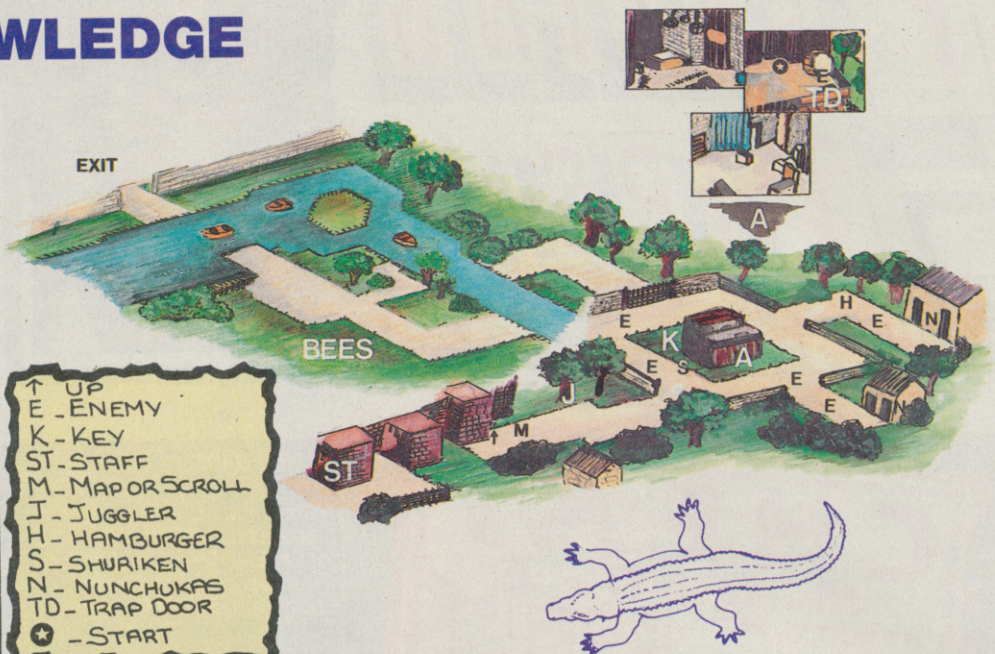
↑ UP
E - ENEMY
K - KEY
ST - STAFF
M - MAP OR SCROLL
J - JUGGLER
H - HAMBURGER
S - SHURIKEN
N - NUNCHUKS
TD - TRAP DOOR
★ - START

bars and you will climb back down, leave and go back past the juggler, in the next room leave by the right-hand exit.

Go through the gap in the wall and be ready to throw a shuriken at a man. Pick up whilst in the women's toilets, go back to the hole in the wall and leave by the top exit. Step through the gap in the wall, throw a shuriken at the

man and pick up in the women's toilets again. Go out and pick up at the hot dog stand. Leave by the top exit and you should be at the gate location, go to the middle of the gate while holding the key, pick up and exit by going through gate. Jump river by using the boat as a stepping stone – this needs practise – and leave. In the next room there are

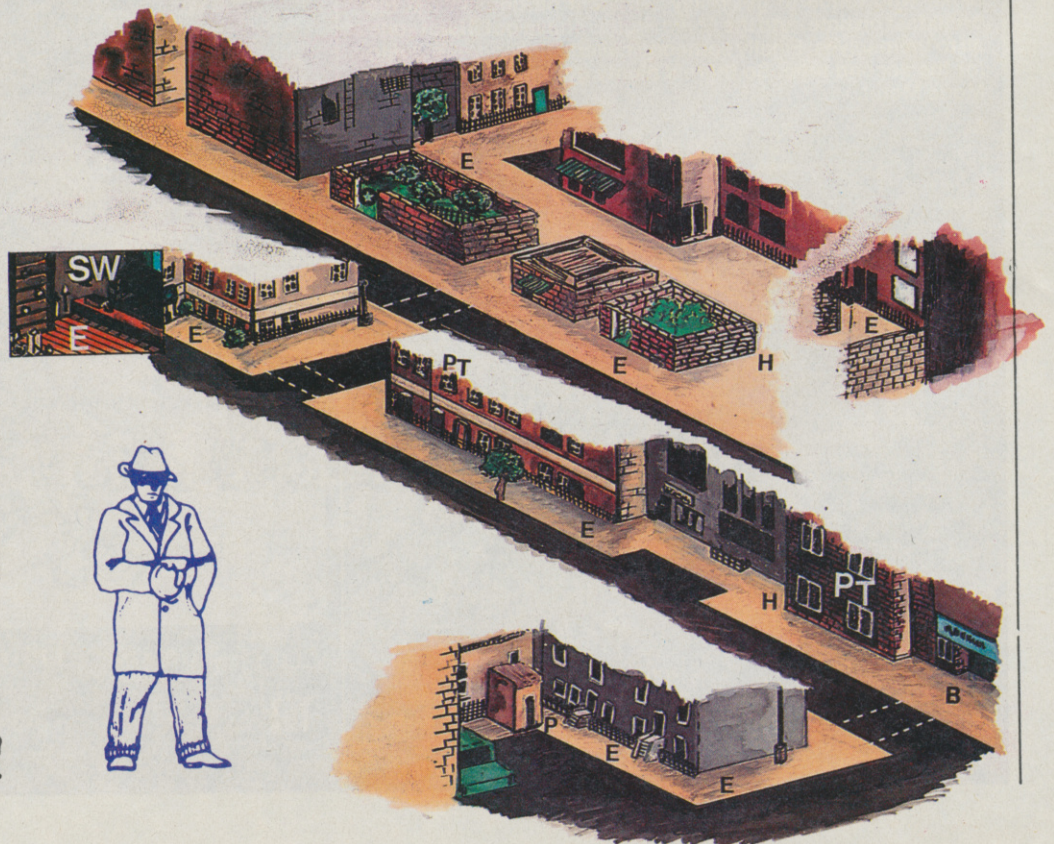
some bees, avoid these and go up the winding path. Get to the middle of the path then run and jump onto the island. Go to the bushes and poke the boat with stick, it should move away. Then get onto the bottom edge of the island, run and jump back onto the path. Now cross the river by using the boat and leave the park to access the second level.

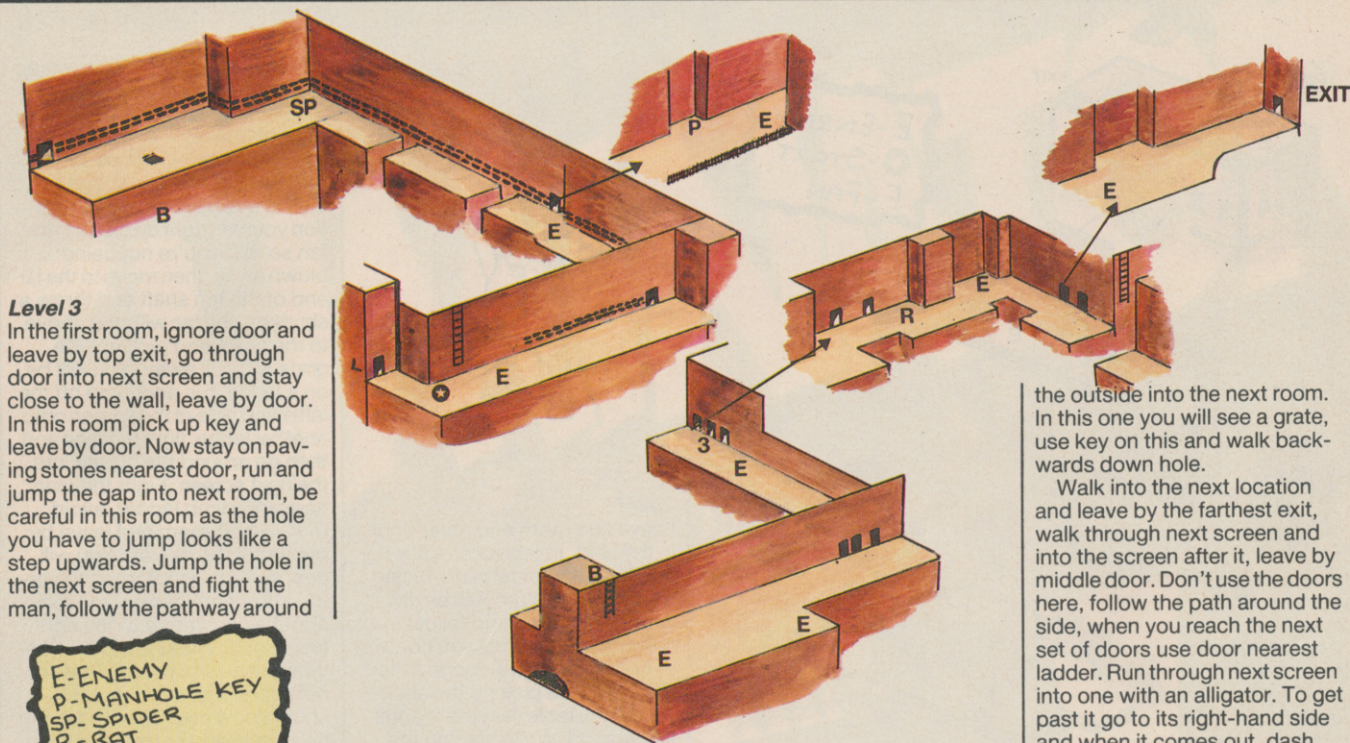
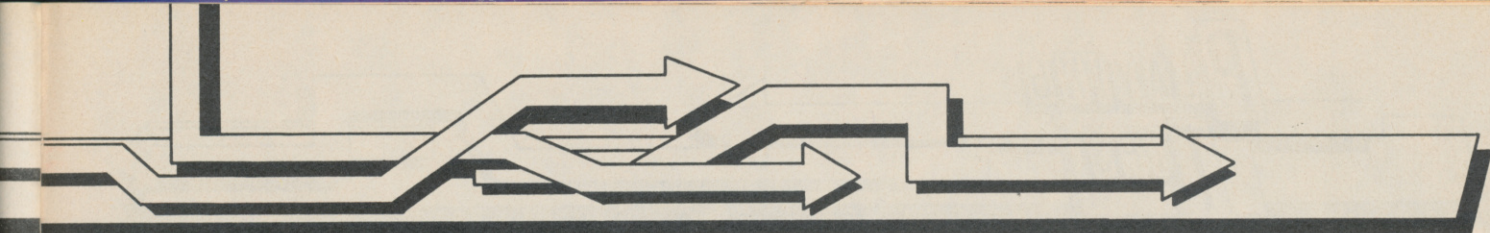


Level 2

Leave by bottom exit and cross road when lights aren't flashing. Cross the road again in the next screen and run along the street for two screens. Here pick up the hamburger and go into the next location to pick up the bottle. Cross road and follow pavement around until you come to a dead end, you will see an open door, pick up while you are in this. Now retrace your steps to the 'eats' shop and cross the road here, follow the pavement around into next screen, go around corner to leave by the bottom exit. Pick up a hot dog and keep on running in the same direction, you should enter a room with a manhole cover in it. While you are holding the object from the open door, pick up when on the manhole cover and fall down the hole to access Level 3.

H - HAMBURGER
PT - POT THROWER
B - BOTTLE
P - MANHOLE KEY
SW - SWORD





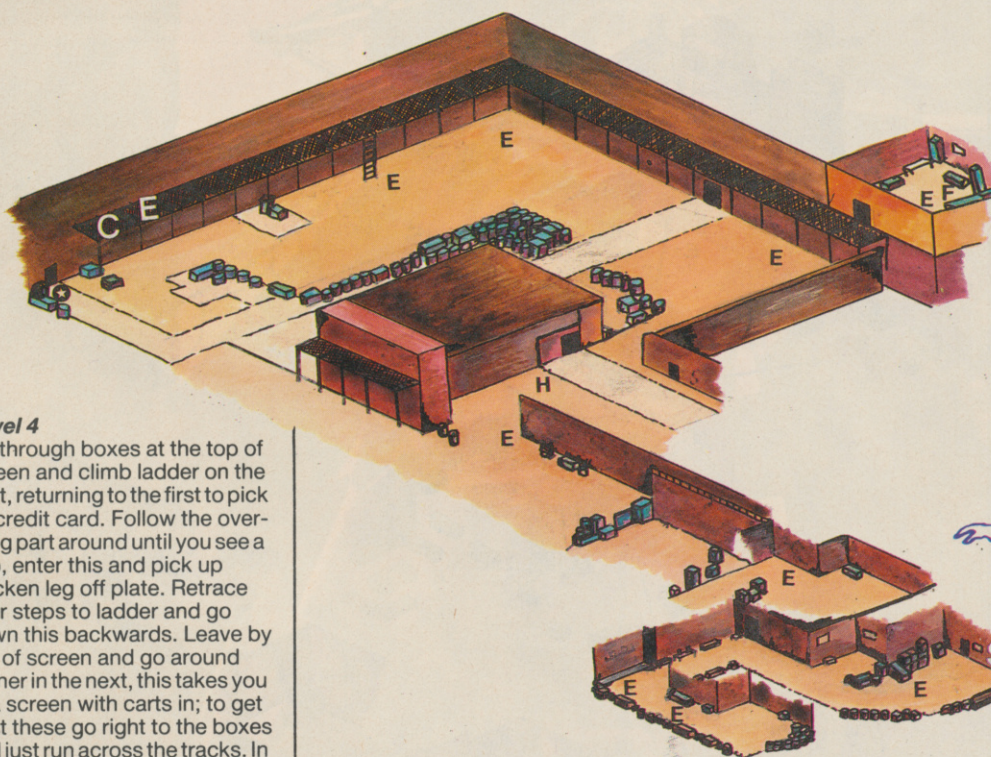
Level 3

In the first room, ignore door and leave by top exit, go through door into next screen and stay close to the wall, leave by door. In this room pick up key and leave by door. Now stay on paving stones nearest door, run and jump the gap into next room, be careful in this room as the hole you have to jump looks like a step upwards. Jump the hole in the next screen and fight the man, follow the pathway around

the outside into the next room. In this one you will see a grate, use key on this and walk backwards down hole.

Walk into the next location and leave by the farthest exit, walk through next screen and into the screen after it, leave by middle door. Don't use the doors here, follow the path around the side, when you reach the next set of doors use door nearest ladder. Run through next screen into one with an alligator. To get past it go to its right-hand side and when it comes out, dash behind, entering the fourth level.

E-ENEMY
P-MANHOLE KEY
SP-SPIDER
R-RAT
★-START



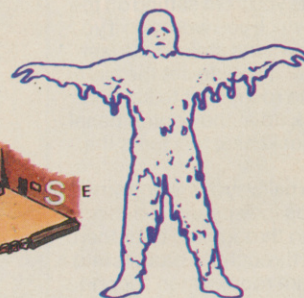
Level 4

Go through boxes at the top of screen and climb ladder on the next, returning to the first to pick up credit card. Follow the overhang part around until you see a gap, enter this and pick up chicken leg off plate. Retrace your steps to ladder and go down this backwards. Leave by top of screen and go around corner in the next, this takes you to a screen with carts in; to get past these go right to the boxes and just run across the tracks. In the next location go around corner into a location where you will have to jump electric wires. Walk into the next screen, go around corner and you should be in a room with pillars in it. Jump from one pillar to another until you're on the one opposite the man, move closer to him until he bursts into action, fight him.

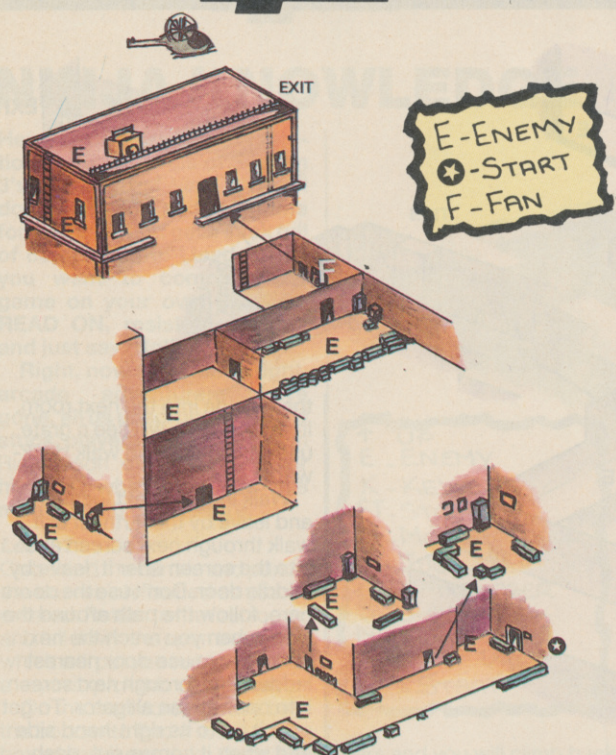
Once you've killed him jump onto the rest of the pillars and into the next screen. Go around the box here and into the next location which should be inside a building. Leave by the right-hand side of the screen and you should see a panther in the corner. Hold chicken leg and go

to the panther, when he raises his head press 'pick up' and he will start to chew. He will then get up and lunge at you - move away. The panther should have now moved forward so you can walk behind it into the next room.

Kill the woman here and hold the credit card, go to control panel on the wall and pick up, the lift should come down, get into it. Ready for Level 5...?



PLAYING TIPS



Level 5

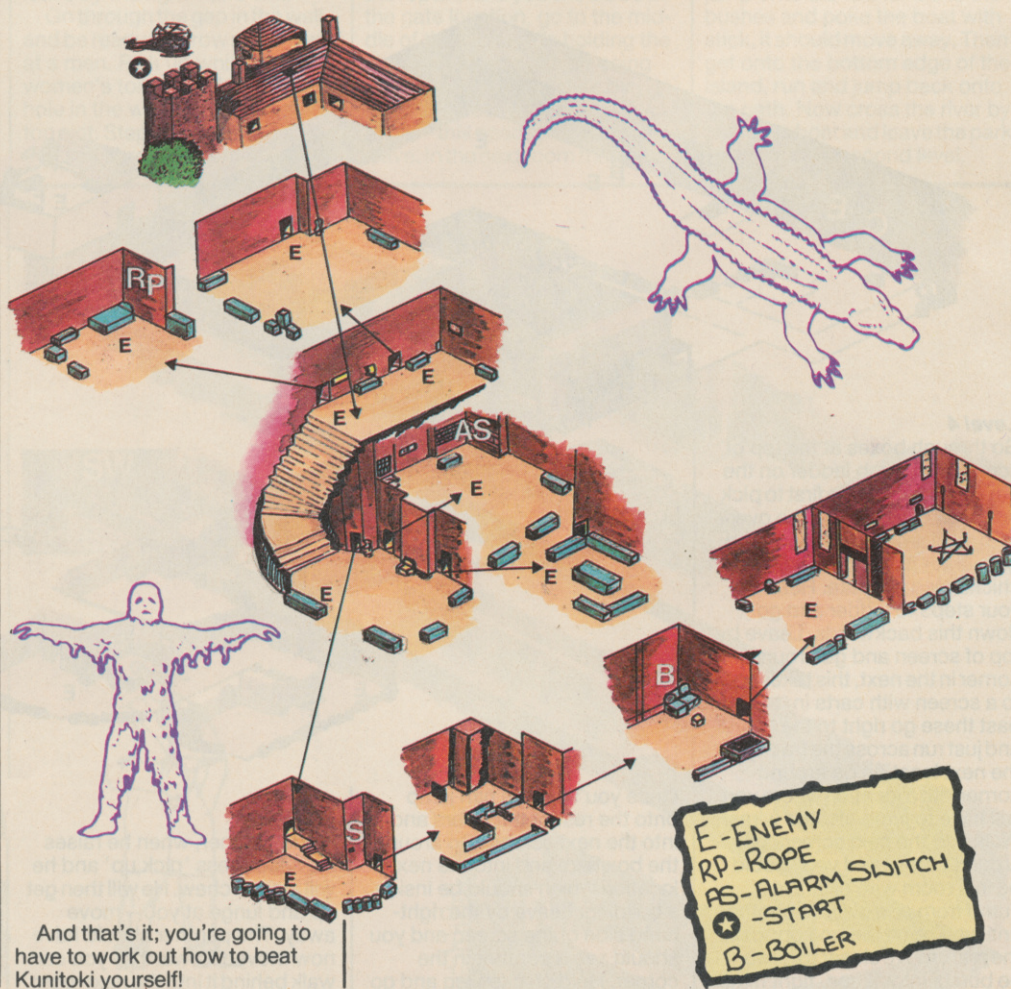
Leave first room and enter door in the next. In this room, pick up at the computer terminal facing forward and you should be given a number. Leave and follow the corridor around until you come to a room with two doors. Enter first door and pick up the shuriken off the table, leave and enter the second. While holding the number, pick up at the computer

terminal, a door will open, enter this and you will see a ladder in the next room, climb it and go through the door at the top. Go through door in the next room and you should see a giant fan. This is tricky; you have to position yourself right up close to the fan so that you're not being blown away, then move to the far end of the fan shaft and throw a shuriken, the fan will stop, move to the grate and pick up; the grate will pull away. You will be on a ledge, run and jump off the left-hand side of the screen onto another ledge, fight the man and then go around the corner into the next screen. Fight the man here and climb ladder, avoid man in next room and leave by the top of the screen. You will now see a helicopter, go to very top corner of building and move about a centimetre to the right (some good if you're monitor's a different size to mine!), face the helicopter and pick up. You should now take off with the helicopter and access the sixth and final level.

Level 6

Drop off the helicopter onto the nearest pillar, then jump to the pillar which is on the slanting bit of roof. Walk left onto the walkway and walk into the next screen. Fight the man here and walk backwards into the skylight, you will fall into the mansion. Do not use door in first room but walk into second and use door there. Pick up the object from the wall and return to the first room and use door now. In this room you will see a hole in the wall, this is a dumb waiter, enter hole when you are holding the object from the other wall and you will fall down into the kitchen. Doing it this way prevents you from setting off the alarm, which you would do if you went down the stairs. One last tip is that if you do set the alarm off, go to room next to kitchen and pick up at the control panel in the bookcase, this turns the alarm off.

In the hallway at the bottom of the steps look carefully behind plant, go through the door there and get through the barriers into the steam room. Open second door last and the steam will move so you can get past, walk through next room and into the room with a giant star on the floor. Pick up at the picture and this will reveal a wall safe, pick up and you will have to enter a code, this is the code from the terminal in Level 5, the orb will now be revealed.



And that's it; you're going to have to work out how to beat Kunitoki yourself!

ELIMINATOR

Ace Programmer
John Phillips,
author of
Nebulus ...

Brings to you
Mind-Blowing
Action,
Electrifying 3D
Graphics -
culminating in an
unimaginable
experience
intent on
destruction

ELIMINATOR

Commodore
Amiga
Atari ST

Spectrum,
Commodore 64
Amstrad CPC



HEWSON

For Mail Order send a cheque P.O. to Hewson Consultants Ltd. Order by credit card by sending your Access/Barclaycard number, and enclose a specimen signature. Don't forget to enclose your name and address.
Hewson, Milton Park, Milton, Abingdon, Oxon. OX14 4RX Tel: (0235) 832949 Fax: 0235 861039

As part of our continuing development of innovative Software we are always happy to evaluate software sent to us with a view to publication.

HIGHLIGHTS OF THE HOWDON HACKERS

Which hackers send in a big selection of hacks every month? Which hackers hacks always work? Yes that's right it's the Howdon Hackers of

Tyne and Wear. They have got a few more +3 hacks for the Pirate compilation, POKEs for *Savage*, *Soldier of Fortune* and much more.

MOTORBIKE MADNESS

- 10 REM MOTORBIKE MADNESS HACK
- 20 REM HOWDON HACKERS'88
- 30 REM
- 40 CLEAR 24830
- 50 LOAD ""SCREENS
- 60 LOAD ""CODE
- 70 POKE 33314,4
- 80 POKE 33542,183
- 90 POKE 39189,183
- 100 POKE 34513,0
- 110 RANDOMIZE USR 32765

SMASHOUT +3 DISK

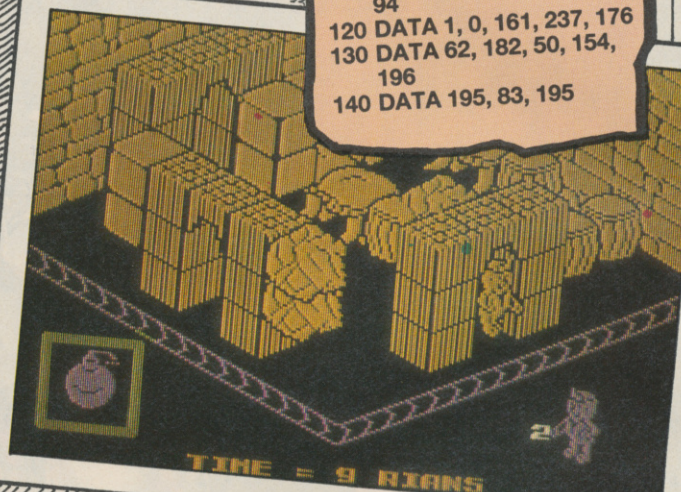
- 10 REM SMASHOUT DISK HACK
- 20 REM HOWDON HACKERS'88
- 30 REM
- 40 BORDER 0: PAPER 0: INK 7
- 50 CLEAR 32000
- 60 LOAD "1A"CODE
- 70 LOAD "1B"CODE
- 80 POKE 23607,227
- 90 POKE 23658,8
- 100 CLEAR 43000
- 110 POKE 23613,108
- 120 POKE 23614,232
- 130 POKE 59500,0
- 140 POKE 59501,0
- 150 POKE 47004,0
- 160 RANDOMIZE USR 43000

CALL ME PSYCHO +3 DISK

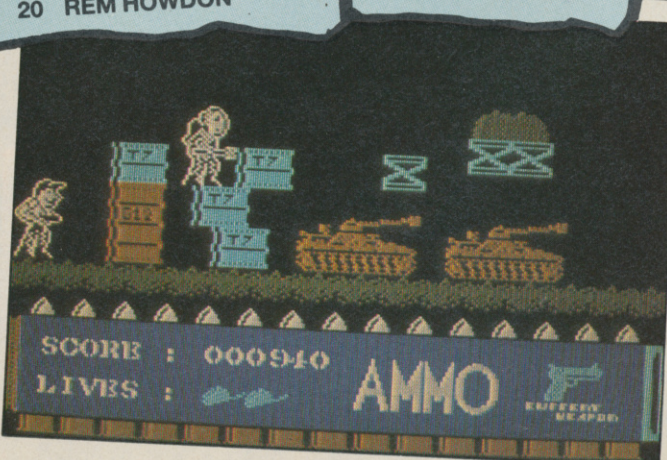
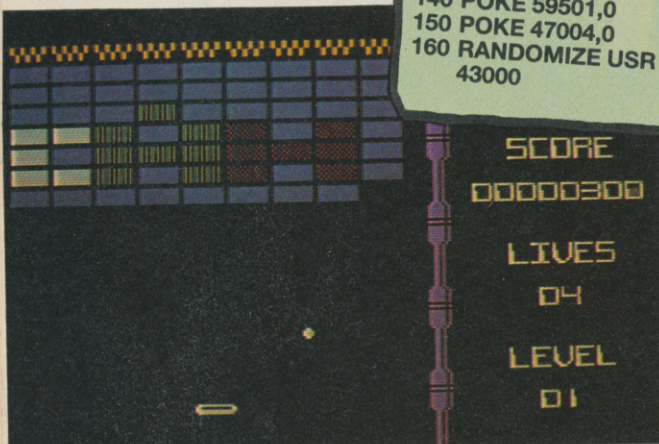
- 10 REM CALL ME PSYCHO DISK HACK
- 20 REM HOWDON

HOLIDAY IN SUMARIA +3 DISK

- 10 REM HOLIDAY IN SUMARIA DISK HACK
- 20 REM HOWDON HACKERS'88
- 30 REM
- 40 CLEAR 65535
- 50 LOAD "3a"CODE
- 60 FOR F=16384 TO 16402
- 70 READ A: POKE F,A: NEXT F
- 80 LOAD "3b"CODE 24264
- 90 POKE 23399,4: OUT 8189,4
- 100 RANDOMIZE USR 16384
- 110 DATA 17, 0, 93, 33, 200, 94
- 120 DATA 1, 0, 161, 237, 176
- 130 DATA 62, 182, 50, 154, 196
- 140 DATA 195, 83, 195



- ### HACKERS'88
- 30 REM
 - 40 POKE 23693,0
 - 50 POKE 23624,0
 - 60 CLEAR 25830
 - 70 LOAD "2a"CODE
 - 80 LOAD "2b"CODE
 - 90 POKE 48050,0
 - 100 RANDOMIZE USR 41900



FIREBIRDS GALORE!

For fans of the Tefal Men's Firebird loader, here are a few more data lines from the Howdon Hackers for you to bolt on to the end. I've reprinted the loader if you missed it last time around.

SAVAGE - LEVEL 1

```
250 REM SAVAGE-LEVEL 1
260 REM HOWDON
    HACKERS'88
270 REM
300 DATA 62, 183, 50, 181,
    146
301 DATA 50, 216, 228, 50,
    129
302 DATA 153, 50, 151, 153,
    50
303 DATA 176, 224, 195, 156,
    99
304 DATA 3122
310 POKE 40612,18
320 POKE 40613,93
330 POKE 40615,187
340 POKE 40616,93
350 POKE 40625,187
360 POKE 40626,93
370 POKE 40628,25
380 IF T=12000 THEN GOTO
    130
390 PRINT "DATA
    ERROR!": STOP
```

FIREBIRD LOADER

```
10 REM FIREBIRD
    LOADER
20 REM BY THE TEFAI
    MEN
30 FOR F=40192 TO 40448
40 POKE F,158: NEXT F
50 LET T=0
60 FOR F=40599 TO 1e9
70 READ A
80 LET T=T+A
90 IF A>255 THEN GO TO
    310
100 POKE F,A
110 NEXT F
120 IF T<>9000 THEN
    PRINT "ERROR IN
    DATA": STOP
130 PRINT AT 10,10;"START
```

SAVAGE - LEVEL 2

```
250 REM SAVAGE-LEVEL 2
260 REM HOWDON
    HACKERS'88
270 REM
300 DATA 62, 183, 50, 152,
    127
301 DATA 195, 188, 102
```

```
302 DATA 4765
310 POKE 40612,18
320 POKE 40613,93
330 POKE 40615,187
340 POKE 40616,93
350 POKE 40625,187
360 POKE 40626,93
370 POKE 40628,10
380 IF T=12000 THEN GOTO
    130
390 PRINT "DATA
    ERROR!": STOP
```

SAVAGE - LEVEL 3

```
250 REM SAVAGE-LEVEL 3
260 REM HOWDON
    HACKERS'88
270 REM
300 DATA 62, 183, 50, 248,
    225
301 DATA 50, 63, 226, 195,
    144
302 DATA 101, 4277
310 POKE 40612,18
320 POKE 40613,93
330 POKE 40615,187
340 POKE 40616,93
350 POKE 40625,187
360 POKE 40626,93
370 POKE 40628,15
380 IF T=12000 THEN GOTO
    130
390 PRINT "DATA
    ERROR!": STOP
```

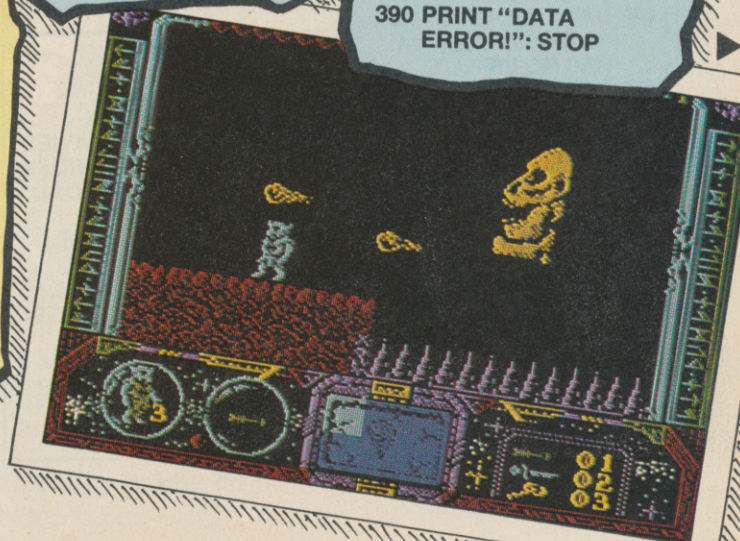


SOLDIER OF FORTUNE

```
250 REM SOLDIER OF
    FORTUNE
260 REM HOWDON
    HACKERS'88
270 REM
300 DATA 151, 50, 99, 182,
    195
```

```
301 DATA 247, 102
302 DATA 4798
310 POKE 40612,18
320 POKE 40613,93
330 POKE 40615,187
340 POKE 40616,93
350 POKE 40625,187
360 POKE 40626,93
370 POKE 40628,10
380 IF T=12000 THEN GOTO
    130
390 PRINT "DATA
    ERROR!": STOP
```

```
TAPE"
140 RANDOMIZE USR
    40599
150 LOAD ""
160 DATA 62, 157, 237, 71,
    237, 94
170 DATA 201, 229, 213, 197,
    245
180 DATA 175, 50, 18, 91, 58,
    0
190 DATA 91, 254, 195, 32,
    18, 33
200 DATA 197, 158, 17, 0, 91,
    1
210 DATA 18, 0, 237, 176, 62,
    63
220 DATA 237, 71, 237, 86,
    243, 241
230 DATA 193, 209, 225, 255,
    201
300 REM BOLT ON GAME
    DATA LINE HERE
```



FLASHBACK

Wow, what a Flashback I've got for all you lovers of the older game this month. All thanks to one man, Craig Davies of Blackpool. Having just completed his A-levels he was faced with hours of spare

time, so Craig decided to spend it hacking all his old software collection, and why not? He's sent in so many POKES that they should keep Flashback going for a few months to come.

ACTION BIKER

```
1  REM ACTION BIKER
   HACK
2  REM BY CRAIG DAVIES
10  POKE 23693,63: CLEAR
    65535
20  FOR N=65000 TO
    65027: READ A: POKE
    N,A: NEXT N
30  DATA 221, 33, 0, 64, 17,
    108, 27, 62, 255, 55, 205,
    86, 5, 210, 96, 234
40  DATA 33, 0, 91, 17, 0,
    118, 1, 108, 0, 237, 176,
    201
50  PRINT AT 10,4: INK
    0:"START ACTION
    BIKER TAPE"
60  RANDOMIZE USR
    60000
70  LET A=30298
80  READ B: IF B<>999
    THEN POKE A,B: LET
    A=A+1: GOTO 80
90  RANDOMIZE USR
    30220
100 DATA 175, 50, 127, 217,
    50, 82, 239: REM INFI-
    NITE SLEEP POINTS
110 DATA 62, 201, 50, 111,
    218: REM INFINITE
    FUEL
120 DATA 175, 50, 50, 220:
    REM INFINITE TIME
130 DATA 175, 50, 51, 217,
    50, 52, 217: REM NO
    COLLISION WITH CARS
140 DATA 175, 50, 37, 239,
    50, 38, 239: REM OIL
    HAS NO EFFECT
150 DATA 62, 3, 50, 22, 219:
    REM ABLE TO SEE IN
    THE DARK
160 DATA 175, 50, 30, 254,
    50, 31, 254: REM NO
    BORING TUNES
170 DATA 175, 50, 209, 253,
    50, 210, 253: REM MES-
    SAGES SCROLL
    QUICKER
180 DATA 33, 174, 226, 229,
    17, 24, 30, 221, 33, 0, 91,
    62, 255, 55, 195, 86, 5,
    201, 999: REM END
    MARKER
```

FRED

```
1  REM FRED HACK
2  REM BY CRAIG DAVIES
10  POKE 23693,0: BORDER
    0
20  FOR N=60000 TO
    60025: READ A: POKE
    N,A: NEXT N
30  CLS: PRINT AT 10,9: INK
    7:"START THE TAPE"
40  RANDOMIZE USR
    60000
50  DATA 221, 33, 0, 64, 17,
    46, 120
60  DATA 62, 255, 55, 205,
    86, 5
70  DATA 210, 96, 234, 175,
    50, 195
80  DATA 121, 50, 97, 147
90  DATA 195, 77, 118
```

FAHRENHEIT 3000

```
1  REM FAHRENHEIT 3000
   HACK
2  REM BY CRAIG DAVIES
3  REM INFINITE LIVES
10  POKE 23693,127: BOR-
    DER 0
20  CLEAR 29923: LOAD
    ""CODE 23296
30  LOAD ""SCREEN$:
    PRINT AT 13,0:LOAD
    ""CODE 29924
40  POKE 30818,0: RAN-
    DOMIZE USR 29924
```

S.O.S.

```
1  REM S.O.S. HACK
2  REM BY CRAIG DAVIES
10  POKE 23693,7: BORDER
    0: CLEAR 26617: LOAD
    ""CODE
20  POKE 33951,0: REM
    INFINITE LIVES
30  POKE 33091,0: POKE
    35238,0: REM INFINITE
    ENERGY
40  POKE 34764,201: REM
    PERPETUAL DAYLIGHT
50  RANDOMIZE USR
    32768
```

SAMURAI WORRIED!

A few tips from Neil Pollard of Peterborough to help on your panda patrols in Firebird's Samurai Warrior.

- 1 Just walk along to the right, and don't bother to go onto another path – this will give you the most chance of gaining lots of Karma.
- 2 When you enter a house, don't draw your sword. There are never any enemies inside. Never gamble if you only have one Ryo left – lose it and you can't buy vital food. Don't waste time trying to bow to the other rabbit, he just stands there.
- 3 Where you are challenged to a duel, go to far left of the screen and draw your sword, holding down fire so that it is lifted above Usagi's head, and release it when your opponent has covered 2/3 of the distance between you. Whatever happens, don't kill him because you will lose Karma.
- 4 Later on in the game, some of the other characters are ninja in disguise. So, after you've bowed to somebody, turn around to face them as they leave the screen, and be ready to draw your sword. This should save many lost hit points due to surprise attacks.
- 5 If an opponent disappears whilst you are fighting him, continuously turn left and right to be ready for him when he returns. Some ninja appear out of thin air in the first place – you just have to learn where they are and be ready for them. They will always try to get behind you.
- 6 In the final level, you will appear inside a building with light streaming in through a gap in the wall. Draw your sword and don't put it away, because there are nothing but enemies in here. As soon as an opponent appears, don't run too far to the right. If you do, you will get more than one opponent on the screen, which is very difficult. All the time, watch out for ninja appearing behind you. Eventually you will reach the panda who is at the end of the section. He is about half your height and looks a bit pathetic. Be careful not to kill him. Bow to him and leave to the right. You have now finished the game.

ROCKMAN

```
1  REM ROCKMAN HACK
2  REM BY CRAIG DAVIES
10  POKE 23693,0: BORDER
    0: CLEAR 24999
20  PRINT AT 10,9: INK
    7:"START THE TAPE":
    POKE 23606,24: POKE
    23607,120: POKE
    23658,8
30  LOAD ""SCREEN$:
    FOR A+0 TO 1: PRINT
    AT 17,0: LOAD ""CODE
    : NEXT A
40  POKE 56332,0: REM
    INFINITE LIVES
50  POKE 52549,0: REM
    INFINITE TIME
60  POKE 40051,N: REM
    STARTING LEVEL (N+1-
    20)
70  POKE 46353,0: REM
    IMMOBILISE NASTIES
80  FOR N+39990 TO
    39997: READ A: POKE
    N,A: NEXT N
90  DATA 81, 65, 79, 80, 77,
    83, 48, 32
100 RANDOMIZE USR
    34000
```



Well, I'm afraid that's it for this month but don't worry, I'll be back again next month with another action-packed plethora of POKES, tips and maps. Don't forget to have a go at that Total Eclipse map (a few POKES on it wouldn't go amiss either because I can't get anywhere!). The address is... **NICK 'SMOKIN' ROBERTS, Playing Tips, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.**

Emlyn Hughes



INTERNATIONAL

SOCCER



RECOMMENDED BY
MATCH

The best... incredibly realistic

ZZAP64

The best football game ever

Commodore Computing

The best ever... an amazing product

Computer & Video Games

**AVAILABLE NOW FOR
COMMODORE & SPECTRUM
£9.95 tape, £12.95 C64 disk**

Coming soon for Amstrad 464/664/6128

Audiogenic

Audiogenic Software Limited, Winchester House,
Canning Road, Harrow HA3 7SJ, England

Order by phone on 01 861 1166







CRASH
ZX SPECTRUM

CRASH BALL

DAVE
PARKER

24 HOUR

COMPUTER REPAIRS

SINCLAIR



QUALITY APPROVED REPAIR CENTRE

COMPUTER SPARES



HOW TO GET YOUR 48K SPECTRUM REPAIRED FOR ONLY £19.95

CALL IN AT OUR MANCHESTER CITY CENTRE BRANCH FOR WHILE YOU WAIT REPAIRS AND SPARES

SPECTRUM (only) KEYBOARD REPAIRS £10.00 THE CHEAPEST AROUND

ORDER NOW USING ACCESS

ORDER NOW!

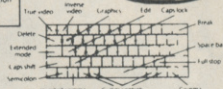
NOW AVAILABLE - the official Spectrum Upgrade!

Turn your Spectrum into a Spectrum + for just £24.95

THE BEST SELLING KEYBOARD IN OUR RANGE

ACCESS WELCOME

- Professional full size keyboard includes 12 extra keys
- Responsive typewriter style action
- Accepts all current Spectrum software and peripherals



The official Spectrum Upgrade. Naturally your upgraded computer will accept all the peripherals in your Sinclair system-Interface 1, Microdrives and so on - as well as all Spectrum software. Just as important, new Spectrum software and peripherals will be designed with the Spectrum + in mind. So the Sinclair upgrade adds stylish looks, new capabilities... and new potential for the future.

The bigger, better Spectrum keyboard. The Spectrum + measures 12 1/2" x 6". It has a large typewriter-style keyboard with hard, moulded keys. You'll find the new keyboard has a smooth, positive action - ideal for touch-typing, word processing, simulation programs, and extended programming sessions. Two retractable legs give a perfect typing position. There are 56 keys in all, including 17 new keys. Programmers will be pleased to see dedicated punctuation keys, a space bar, and separate shift keys for graphics and extended models. And a reset button allows you to clear a program from your computer's memory without disconnecting the power supply.

- HOW TO ORDER BY MAIL
- If you require us to do the upgrade for you please send £31.90 - £1.75 p+p. Total £33.65
 - Should you require the do-it-yourself kit just send £24.95 - £1.75 p+p. Total £26.70
 - If you require your Spectrum to be repaired and upgraded to a Spectrum Plus we have a special offer price of just £30.00 complete. Orders can be placed by using our Access/Visa Card on the numbers below.

2X81 SPARES NOW IN STOCK

TEN ★ REPAIR SERVICE

- While you wait repairs £22.50 48K Spectrum. £25.00 Spectrum +2
- All computers fully overhauled and fully tested before return.
- Fully insured for the return journey.
- Fixed low price of £19.95 including post, packing, parts, labour. Spectrum +2 repairs only £25.00 fully inclusive.
- Discounts for schools and colleges.
- Six top games worth £39.00 free with every Spectrum repair. Now includes FREE memory/keyboard test.
- We also repair Commodore 64's, VIC 20, Commodore 16 +4, Spectrum +2 and +3.
- The most up to date test equipment developed by us to locate faults within your computer.
- Rubber keyboard repair (replacement membrane only). Just £10.00 including p+p
- 3 month written guarantee on all repairs.

BEST SERVICE - BEST PRICES!

ARE YOU ANOTHER CUSTOMER - fed up waiting weeks for your estimate?

Need your computer repaired fast? Then send it now to the **Number One Repair Company** in the U.K., or call in and see us at our fully equipped 2,500 square foot workshop, with all the latest test equipment available. You are more than welcome. We will repair your computer while you wait and help you with any of your technical problems. Commodore computers repaired for only £35.00. Please note we gave you a 100% low fixed price of £19.95 which includes return post and packing. VAT, not a between price like some other Repair Companies offer. We don't ask you to send a cheque in for the maximum amount and shock you with repair bills £30 upwards. Don't forget we are Amstrad approved for quality and speed, don't risk your computer to any other unauthorised repair centre. We don't just repair the fault and send your computer back, we give your computer a:

FREE OVERHAUL WITH EVERY REPAIR WE DO:-

We correct colour, sound, keyboard, check the loading and saving chip, even put new feet on the base if required. Check for full memory, check all sockets including ear/mike and replace where needed. All for an inclusive price of £19.95 which includes VAT, parts & labour, return post, packing & insurance. No hidden extras whatsoever.

(Should a computer be classed as unreparable due to tampering we may be able to offer a replacement circuit board at additional charge.)

URGENT NOTICE Don't be misled by adverts showing 'between prices.' A recent complaint against a Manchester repair firm, Mancomp, was upheld by the Advertising Standards Authority on two counts, "It had stated BBC repairs between £14 and £45 then charged the customer £85." Their guarantee policy was misleading as it did not make clear that all repairs were not covered.

THE VIDEOVAULT COMPUTER COMPANION EDITION NOW HOT OFF THE PRESS

New bigger catalogue now available containing over 2,500 items including software for all computers, joysticks, spare parts, business software, books, plus many more. Just send 3x19p stamps for your free copy. Over 20 pages full of top quality products delivered to your door by return post.

VideoVault

Old Kingsmoor School, Railway Street, Hadfield, Hyde, Cheshire SK14 8AA
Tel: 04574 66555/67761/69499 Main Office, enquiries and orders only.
Manchester telephone 061-236 0376 While you wait centre only.
We regret the Manchester Branch cannot take mail order orders, please use main office number



Ltd.

OPEN 7 DAYS A WEEK
MANCHESTER MON-SAT ONLY

POST + PACKING CHARGES UK ONLY OVERSEAS POST + PACKING CHARGES PLEASE WRITE FOR QUOTE

SPECIAL OFFER NOW

PLUS 6 GREAT FREE GAMES BONUS FREE TESTER ON EACH TAPE TO TEST YOUR KEYBOARD, MEMORY TEST. £39.00 YOURS FREE WITH EVERY SPECTRUM REPAIR

EXTENSION RIBBON

56 Way ribbon cable to extend your ports for your peripherals £10.95 plus £1.75 p+p

JOYSTICK & INTERFACE PACK

The Cheetah 125 - Rapid Fire Joystick and Ram Dual Port Turbo Interface. Recommended retail price £20.90. Special offer price £18.95. Items can be purchased separately. Ram Dual Port Turbo Interface £12.95 + £1.75 p+p. 125+ Joystick £7.95 + £1.75 p+p

SPECTRUM REPLACEMENT POWER SUPPLY UNIT

Brand new design. Power supply for your Spectrum doesn't even need a plug, only £10.95 + 1.75 p+p.

KEYBOARD MEMBRANES

Spectrum keyboard membranes £5.50 plus £1.75 p+p. Spectrum Plus spare keyboard membranes £12.90 plus £1.75 p+p

ON-OFF SWITCHES

FOR THE SPECTRUM AND SPECTRUM +. ORDER No. 1067 SPECTRUM £4.95 + 1.75 p+p. 1067A SPECTRUM+ £4.95 + 1.75 p+p

USE ANY JOYSTICK WITH YOUR SPECTRUM + 2 SINCLAIR JOYSTICK ADAPTOR FOR CONNECTING SPECTRUM +2 COMPUTERS TO MOST JOYSTICKS

ORDER No. 1062 SPECTRUM+ JOYSTICK ADAPTOR R.R.P. £5.95 + 1.75 p+p



FULLY REPAIRED AND TESTED ON MOST ADVANCED TEST EQUIPMENT IN EUROPE!

CRASH



LITTLE SHOP OF HORRORS

All the cold weather's frozen the swamp down at the motel and JON BATES is saddened that he can no longer watch the cars bubble and pop their way under it. Still it hasn't affected his activities at the motel, the showers are running freely and no doubt the guests will be too . . .

AN WEBSTER has come all the way from Kettering in Northants and has a tip for all *RAM Music Machine* users. He can load individual sounds created on his own A1 sampler into the *Music Machine*. Working with a Microdrive he reckons that sample data from any machine can be reloaded into the *Music Machine*. The method goes like this . . . Load and run the *Music Machine*, then delete all the sample data. Enter the sample page and give it a name for a new sample. Manually trigger the sampler without a signal present at the input. This will have the effect of filling the memory space with nothing! Quit the sample page and return to BASIC via the main menu. Load from the Microdrive your previously saved sample data, and to be on the safe side load it to 47000, making sure that the data doesn't exceed the amount of free memory. Re-enter *Music Machine* by a GOTO 30 command

and enter the Edit page. You should now see your new data implanted into the previously blank sample. Trim the front and back and Ian reckons you should have a sample in there.

TANDY ISN'T DANDY

AK Battock from Maidstone, Kent is one of several guests who has left behind complaints about the Z codes and the complexity of understanding MIDI from the user manual of whatever instrument you happen to be using. Well, first of all you can play up to eight voices simultaneously from the MIDI out on the Spectrum +2, provided of course that the instrument that you have hooked up to is capable of doing so in the first place. You pick the channel you want to use by including the letter Y followed by the channel number. The Z prefix indicates that what follows is a MIDI decimal code. As some of the codes are several decimal numbers, prefix each

one by the Z code. If you want a fuller understanding of MIDI codes and how they work there is a veritable industry of literature that has been issued on this subject — libraries are often good sources. To be honest, the majority of books on the subject are all pretty good at explaining the basics. The codes can be a source of merriment, though, as sometimes they are quoted in

'Sample data from any machine can be loaded into MM'

hex and sometimes in decimal. Borrow a conversion table or scientific calculator.

You also ask about controlling the percussion set. With a bit of luck, the percussion department on your keyboard will be preset on a MIDI channel and each drum will have a particular note number assigned to it. No Z codes required. You mention that you have Tandy MIDI cables. Whilst they are OKish, I have found that when mother and myself hook up all our gear, the aforementioned brand of cables are not the best conductors of MIDI data. I reckon that there is too much resistance in the wire, and that they're really

just good old-fashioned five pin audio leads brought out of hibernation for a new lease of life and some outlandish profits. It's

'You can play up to eight voices simultaneously'

definitely Cabin One for them when they check in!

SPECCY SWAPPING

Another beginner on the MIDI stakes is **Martin Wheeler** from Strood, Kent who has an XRI interface plus sequencing and Casio editing software. He has the unfortunate problem of either or both programs locking up. Long distance diagnosis is not our forte, but it could be that your MIDI cables are running too close to the monitor and scrambling the data due to the

'Maybe the interface is having premature senility'

magnetic field surrounding the cathode ray tube. On the other hand I seem to recall that the really early editions of the XRI

Casio editing software had hiccups that were sorted out quite quickly. Maybe the interface itself is second-hand and is having premature senility. It is unlikely that it is due to your lack of knowledge about MIDI programming that this is occurring. In short, try to eliminate all possibilities; swap Speccies with a

mate, rearrange the cable layout, see if you can borrow some XRI software and maybe another interface until the cause manifests itself. If it is your software then contact XRI.

Well, that's just about it for this month. Till next month, watch out for shadows on the shower curtains...

Bates motel.

GUEST LIST

Ian Webster, Kettering, Northants.

A.K. Battock, Maidstone, Kent.

Martin Wheeler, Strood, Kent.

Michael Carter, Newcastle-upon-Tyne.

TECH TIPS

Almost a year since CRASH's first in-depth look at the SAM, MGT invited the press down to their new Swansea headquarters for a comprehensive briefing and a look at the production prototype. IAN CULL was there and explains why MGT might be onto a winner.

£150 SUPERCOMPUTER?

MGT turbocharge 8-bit computing

MILES GORDON Technology is a company with a purpose. According to their PR, the company was formed – just two years ago – with the express purpose of developing a high-quality, user entry-level computer. Amstrad's dismantling of Sinclair Research at that time certainly ended rumours of a Super Spectrum, leaving a gap for an innovative, British computer developer.

MGT, by contrast, have plans to create a whole new series of computers. Much as the ill-fated Enterprise before it, SAM prom-

ises superior capabilities and upward compatibility so that you can uprate your base machine, rather than having to throw it away, for additional features. Unlike the Enterprise, SAM is compatible with a large amount of existing Spectrum software (about 80%) and is deliberately starting with a small production run, and high quality control, to avoid Sinclair's notorious problems.

To further ensure the machine's success it has been designed with an eye to education requirements. Both the cheap price and a built-in networking facility mean it should

be highly attractive in this area. To keep costs down, and reliability good, the chip count has been kept low. This ease of manufacturing is also useful for licensed production abroad. An Indian manufacturer has already been signed up, not only to produce for the massive Indian market, but for the UK as well.

At first SAM will be available only through MGT's well-established mail order department, but there are plans to expand into the high street. MGT are aiming for sales of 56,000 in the first year, about half of them in the UK.

Possibly the most interesting



'SAM will positively bristle with interfaces'

aspect of SAM is its use of an 8-bit Z80B processor, when both Atari and Commodore have gone firmly for 16-bit technology. MGT's reasons for this involve low cost and the long experience software houses have with the Z80. As a result, MGT expect to have a lot of software available at launch.

Moreover SAM's Z80 chip will be running at 6 MHz, compared to 4 Mhz for the Spectrum.

Most of the development work on SAM has revolved around the design of a custom Fujitsu ULA chip. This relatively advanced chip will contain all the circuitry developed using around 130 individual ICs. Production SAMs will thus have just seven chips – Z80B microprocessor, 32K ROM, 256K RAM in two chips, six-channel stereo sound chip, 64-colour TV modulator chip and the ASIC itself. It will also be possible to add an additional 256K RAM and one or two disk drives – these are a new ultra-thin Citizen design, and will mount in the front of the computer *under* the keyboard!

The basic SAM will positively bristle with interfaces. There's a standard Sinclair joystick interface, a mouse port, monitor and TV outputs, audio output, MIDI In and Out connectors (the Out can double as Thru), printer (serial or parallel will be supported using an 'intelligent' cable), light pen input and cassette. There is also a full expansion connector. On top of that there's a 71 key keyboard with 'soft' key definitions, allowing any key to be a function key beside the 10 function keys available.

At the heart of all this there's the ROM, written by Dr Andy Wright, the author of Spectrum *Beta Basic*. Anyone who has

used *Beta Basic* should therefore be assured that the SAM is going to be a 'good machine'. It will still be a Basic computer, but will have letter-by-letter entry (rather than the 48K Spectrum keyword system). There will also be a built-in Disk Operating System similar to the Plus D DOS, but able to handle random access files.

'Mode 2 is a 'Super Spectrum' screen'

The performance all this hardware offers is pretty impressive. On the sound front the Philips chip has six channels (the Amiga has only four) which can output



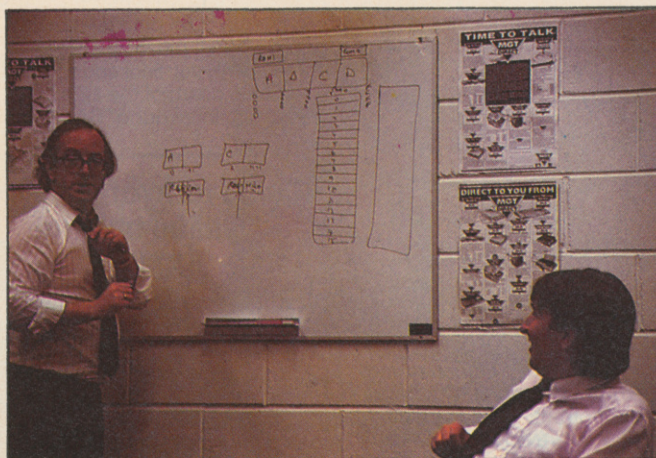
▲ A cardboard mock-up of the designer computer casing

through headphones or hi-fi, as well as the TV. However, the screen graphics are where the computer will really shine. There are 64 colours available, accessible via the colour look-up table. There are four modes available.

Mode 1 is a Spectrum screen – eight colours with bright and flash, with 8x8 attributes (hence colour clash) on a 256x192 pixel display. However, the eight colours need not be original Spectrum ones – any of the 64 can be selected.

Mode 2 is a 'Super Spectrum' screen – the same 256x192 pixels with separate attributes, but having a separate attribute byte for each 8x1 pixels on screen – thus eight times as many different colours can be onscreen at once. This mode also enhances the normal Spectrum display by re-ordering the pixels so that they run sensibly from top to bottom (rather than jumping in thirds as the normal Spectrum does now). Anyone who has tried to write machine code display routines will realise the significance of this.

Mode 3 offers the same 256x192 pixels – but each pixel can be *individually* set to one of



▲ Bruce Gordon explaining memory pages to Alan Miles on the right

games programs.

Mode 4 is a text screen, offering 512x192 pixels. Each pixel can be one of four colours, but having 512 pixels across the screen allows a readable 80 character display.

One powerful feature of the screen palette is that it can be altered very quickly. So, using interrupts, it would be possible to change the 16 colours in use by Mode 3 while the screen is being displayed – this would give access to the full 64 colours at once (a similar technique to the Spectrum Rainbow Processor, but easier to implement). The SAM Coupé can even change screen modes part-way down the screen – allowing adventure games to have a very hi-res picture of the location, with 80 column text below for description. It's also possible to

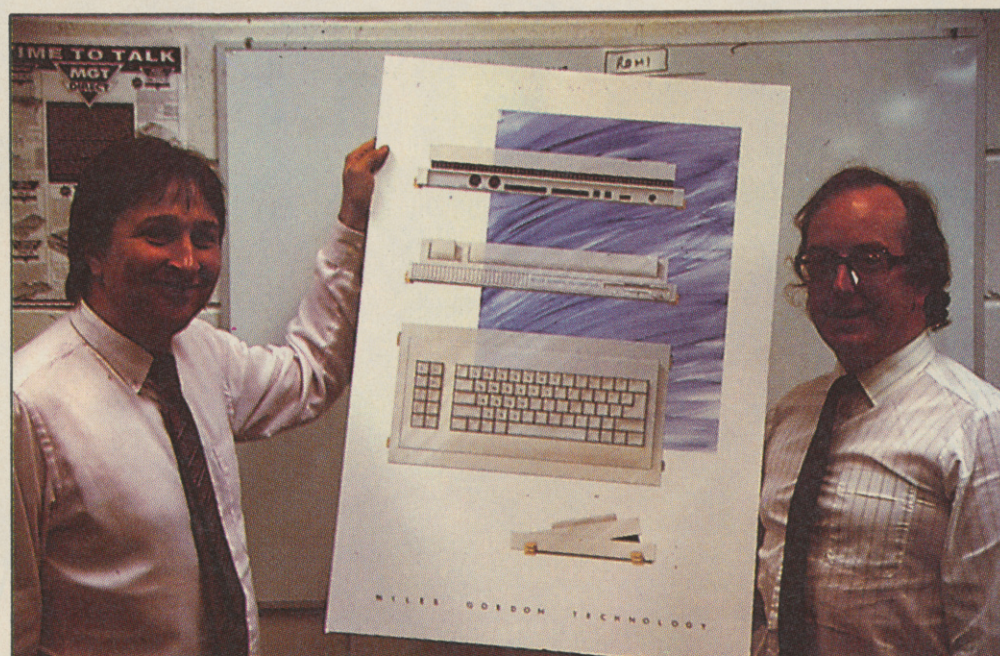
change the location of screen memory by altering a single register (so a number of screens can be instantly displayed).

'Multitasking would be quite easy and very fast'

The memory paging system is also an innovation (especially when compared with the 128K Spectrum's system). The Z80 processor can only access 64K of memory – so even with 32K of ROM and up to 512K of RAM, the Coupé can only use 64K, without special hardware. The SAM Coupé architecture splits the Z80 memory map into four 16K blocks – A (memory addresses hex 0000 . . . 3FFF), B, C and D (hex C000 . . . FFFF). The ROM is split into two halves – one can be brought in over block A (holding BASIC code) and one over block D (holding DOS).

There are two 8-bit registers in the hardware, which can be used to select which 16K pages of RAM from the 256K (or 512K on an expanded SAM Coupé) are to be accessible by the Z80. Reglo selects which page is accessible through block A. The hardware *automatically* makes the next page available through block B. Similarly, Reghi does the same for blocks C and D.

This may sound complex, but gives two major benefits. The first is that a complete, new 64K memory map can be brought in with one machine code instruc-



▲ Miles and Gordon with The Nick Holland Design Group's design

tion, writing to Reglo and Reghi at once (as a 16-bit word). Multitasking (of up to four programs at once) would therefore be quite easy and very fast. The second benefit is that it will be possible to write programs that can use the full available memory! If all memory is accessed via blocks C & D using a memory pointer, then any 32K can be accessed as a normal paging mechanism would bring in the next page – losing the current block D contents. This makes handling information which crosses the boundary very difficult.

The SAM system, however, makes the problem nonexistent. Incrementing the Reghi value will effectively shift the memory in block D down to the block C area, and bring in the next page to block D. Now the pointer can be reduced by 16K (a simple machine code subtraction) and it is then still pointing to the same information (though now at address BFFF). The following page is now available, but so is the previous data.

Another feature of the SAM Coupé is that all the ROM code can be de-selected (giving an all RAM machine) and memory A can be write-protected. This allows a new ROM to be loaded

into block A then locked, preventing corruption by rogue programs.

'Many existing Spectrum games can be loaded in and run without problems'

This brings us to the facility of the SAM Coupé to emulate a Spectrum. The Mode 1 screen already gives the same screen format as the Spectrum. The Coupé also has hardware circuits to emulate the Spectrum BEEP command. By loading in a tape copy of a Spectrum 48K ROM to memory block A, then write protecting it, the result is a computer which behaves very like a 48K ZX Spectrum, but running faster than normal (with the possibility of choosing a new palette of colours, too).

This feature of the SAM Coupé will mean that many existing Spectrum games can be run without problems (the Coupé even emulates the ULA feature used in games like *Arkanoid*, and omitted by Amstrad in their +3 and +2A). The Coupé will not be

able to run 128K games – but its more elegant memory addressing a vastly superior sound may mean the death of the 128K Spectrum in favour of SAM!

'Some form of snapshot will be built into SAM'

Miles Gordon Technology are trying very hard to create a new, very customer-orientated computer market. The SAM Coupé can take hardware add-ons in much the same way as the Spectrum does (indeed, some Spectrum add-ons can be used with the Coupé) but a proper edge connector will mean the end of RAM pack wobbles! MGT are also making an expansion frame (reminiscent of the Gordon Microframe) for 'power

users'. In addition MGT will try to control add-on manufacturers so that hardware clashes are avoided – I/O port locations will be allocated to each manufacturer. Some form of snapshot will also be built in, allowing tape-based users upgrading to disk to transfer their games without hassle.

One other point worth making is that, while we have not yet been told what the rest of the SAM series will consist of, MGT assure us there *will* be an upgrade – no more 'throwaway' computers. My suspicion (based on Alan Miles' comment that the Coupé is taking 8-bit technology 'as far as it can go') is that a new processor will be used in later models. Perhaps the Coupé will simply be a keyboard, screen and disk interface for some faster processor (much like the old Acorn/BBC tube design) . . .

As the SAM Coupé comes nearer to being on the market, CRASH will continue to monitor its progress – it is hoped that a pre-production will be available by the end of February. In the meantime expect the delayed Version 2 DICE review and much more besides. Letters pleading for SAMs should be addressed to MGT, Lakeside, Pheonix Way, Swansea SA7 9EH, (☎ 0792 791100). Everything else can be sent to Ian Cull, Tech Niche, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB. See ya . . .

OUT OF THE LIGHT

AND INTO THE DARKNESS WITH A TRIP TO FINLAND!

TOTAL ECLIPSE

returns for another competition.

No-one can bribe the Comps Minion, but the prize was so good we couldn't resist.

Hands up those clever bods among you who know when the next total Solar Eclipse will be happening? Did I hear the 22 July 1990? No, didn't think so, but that's the date. And the place? Finland. Now that's a fair few miles away, so Incentive will fly the two first-prize winners there (better pack your winter

woolies) and insulate their wallets/purses with £100 of spending money.

If you would like to have the trip of a lifetime, visiting Finland, just answer the questions below, stick your answers in the nearest post box. All postcards must reach us by March 2, and the usual rules and regulations apply. You'll be competing for this fab prize against readers of THE GAMES MACHINE and ZZAP, so hurry up and get those correct entries in. Send 'em off to . . . I'M BLINDED BY THE LIGHT, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.

1 Who are the authors of *Total Eclipse*?

- a) Minor Developments;
- b) Mini Developments;
- c) Major Developments.

2 In which year is the game set?

- a) 1920;
- b) 1930;
- c) 1940.

3 Who is the Egyptian Sun-god?

- a) Re;
- b) Ra;
- c) Horus.

CRASH
COMPETITION

GAGNER UN SÉJOUR À PARIS!

OR EVEN WIN A HOLIDAY IN PARIS!!

SKATEBALL

the violent new game from the French-based software house **Ubisoft**, bears more than a passing resemblance to the film *Rollerball*. Set in the future it has two-a-side teams engaged in brutal and gladiatorial combat which usually ends due to lack of players rather than completing the full nine rounds. To set up this competition I thought that I'd better brush up on my French before speaking to our continental cousins. For days I wandered around the Towers with phrase books – much to the amusement of the CRASH team – practising on anyone who wasn't fast enough to run in the opposite direction (usually Lloyd).

After a while even Lloyd knew how to avoid me, though, so I had to lock myself into the cupboard and practise my verbs and nouns on Tiddles, at least he seemed to understand what I was saying. But when I had at last plucked up the courage to phone Ubisoft in France I found that their English was much better than my French. They explained the details of the competition and the prizes on offer.

The comp is open to all CRASH readers and there are fifty prizes on offer. The first is a **weekend for two in Paris**, with either a free day pass to the Science and Technology museum or, depending on availability, a free ticket to a sports event in Bercy, or even a free riverboat trip down the River Seine (some folks can never make up their minds). Another nine people will receive an **Ubisoft T-shirt**, whilst a further forty people will get a bag filled with a variety of **Ubisoft goodies** (clocks, pencils, posters).

Answer the following four questions, and you could be the lucky winner of either the weekend break, a T-shirt, or the old junk that Ubisoft no longer want and have thrown out (only kidding, folks). Send all entries to us by March 2, and no cheating or we will send Inspector Clouseau to sort you out. The address is, as per usual, **GET YOUR SKATES ON, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.**

- 1) Which two sports does *Skateball* resemble?
- 2) Who main-starred in the movie *Rollerball*?
- 3) In which city do Ubisoft have their headquarters?
- 4) Which famous French leader did the fictional 'Jackal' attempt to assassinate?

CRASH

COMPETITION





● **Capcom**
in acid house shocker!

Producer **GOI/Capcom**
Trippin' out **£8.99** cass
£12.99 disk
Author **Probe**

Get down to the groovy, Acid House beat with this Oriental beat-'em-up. Tory MP Ivan Aston-Martin claims 'It's a disgrace!' (are you sure about this? – Ed) although Capcom claim the use of the infamous Smiley logo to represent lives is totally innocent.

In ancient China the ruthless Ryu Ken Oh has kidnapped some defenceless children ('It's a disgrace' – Rt Hon Aston-Martin). Martial arts expert Lee Wong sets off to rescue the kiddies. At first he has only an axe, but can exchange it for more useful weapons, like spears and sickles, by hitting special urns.

A mixture of horizontally-scrolling levels and small rooms must be completed before you meet Mr Oh himself. Some of these are populated by hordes of sword-swinging minions, while others contain more ruthless opponents which can kill with a single blow. Some extra-large baddies can grab Lee and throw him for a fatal fall.

Animation of the fighters is very basic – no matter where you hit an opponent, the 'hit' always shows up on his neck. Colour is also used only in layers across the screen, although this is far

better than monochrome. Nonetheless, the game has a sloppy appearance – the one vertically-scrolling level is appalling (the hero just floats upwards as decapitated dragons' heads chase him).

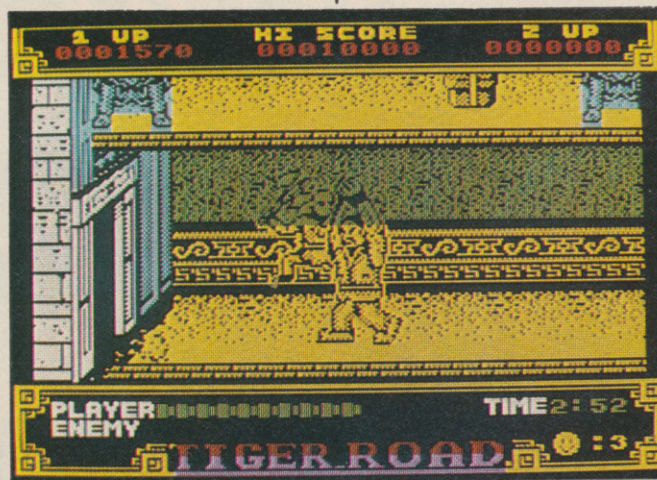
Gameplay is also poor, simply consisting of bashing baddie after baddie. Even the larger opponents can be easily despatched by repetitive slashing ('Disgusting!' – Mrs Whitehouse). Still, allegations that playing this at 2am, while sniffing smelly socks, produces hallucinations have been tested and proved totally false.

PHIL 45%



MARK There's a fair variety of aggressive opponents with different attack methods, quite a few different weapons to deal with them and a passable tune. Unfortunately the largely monochromatic graphics are poorly drawn and move jerkily. Given the complete lack of originality, the repetitive gameplay and the ease with which it is completed this seems something of a waste of time. While not a terrible game, it has little to attract potential buyers.

49%



▲ One of the houses along the way with irate resident

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: jerky sprites on dull, usually yellow, backgrounds

Sound: fair oriental tune, but dull in-game effects

General rating: no inspiration here, just another dull hack 'n' slay game

Presentation	47%
Graphics	45%
Sound	50%
Playability	49%
Addictive qualities	44%

OVERALL 47%

Producer **Elite**
Licence fee **£14.99** cass
£14.99 disk
Author **Byron Nielsen**

Errr... I know it, I know it! Well, not exactly – fans of the BBC quiz show will know that the squeaky-voiced Emyln Hughes has been replaced by Ian Botham. But still hosting the show is the perennially grinning David Coleman. If you've watched the so-called sports experts getting easy questions wrong, now's your chance to prove how knowledgeable you are.

As Ian Botham or Bill Beaumont, you can choose the other two members of your team – each has a specialised sport for the 'Home Or Away' question. After loading in one of five blocks of questions, David Coleman introduces 'the show' via speech bubbles. Answers are made by choosing one of four multiple choices, if you're wrong the question is offered to the other side.

First round is the Pictureboard: team members takes it in turn to choose one of twelve numbered panels to reveal a question category.

Producer **Activision**
Trillion dollar pipedream **£9.99** cass
Author **Source**

Not everyone loves Gorby, the hip Russian president. Who will the software houses use as enemies if he keeps disarming? Well, for the moment Activision are happy living in simultaneously both the past, with evil Ruskies, and the future with the fantastic Star Wars, or SDI programme – here represented by just one laser satellite.

You aim its laser by moving the cursor around the screen, hold down fire and you move the satellite too. While lasering your way through the oncoming missiles and space fighters you should watch out for bonus pods, offering extra speed, multiple cursors and extra firepower.

Between stages the player is presented with a statistical representation of their performance, a perfect 100% kill on all three types of craft (missiles, satellites and fighters) earns the player an initial bonus of 20000 points (this rises by 10000 points per round), and a



▲ What's Nick Roberts doing on Botham's team?

Another round is Mystery Personality, in which the identity of a sportsperson must be guessed from text clues. Home Or Away involves each team member choosing a question, either on his/her own sport for one point, or on any other for two. Guessing 'What Happened Next' is the objective in the round of the same name. Again, fans of the TV show will be disappointed to find there are no graphics, just a text passage.

The final two rounds are the Quickfire round in which nine questions must be answered in 45 seconds, and the Pictureboard again.

What is really lacking in *A Question Of Sport* is variety: all

QUESTION OF SPORT

● A question of programming

THE ESSENTIALS

Joysticks: Sinclair

Graphics: only the digitised pictures of Mr Coleman et al

Sound: a fair 128K title tune, but only a couple of in-game effects

Options: one or two players

General rating: sports buffs won't like it because it's too easy, while sports-haters won't like it anyway!

the rounds are multiple-choice text questions whose answers can soon be remembered as they repeat themselves. Even worse, TV sports buffs will probably be disappointed to find the questions are rarely that hard in the first place.

PHIL 46%

MARK Great, not only do we have David Coleman's banal wafflings assailing our ears on the TV, now we have a computer game version. And yes, all of your favourite rounds are here, the Pictureboard, Mystery Personality, and What Happened Next? pop up when you are least expecting them. I personally can't stand the TV show, but the game's even worse.

50%

Presentation 54%

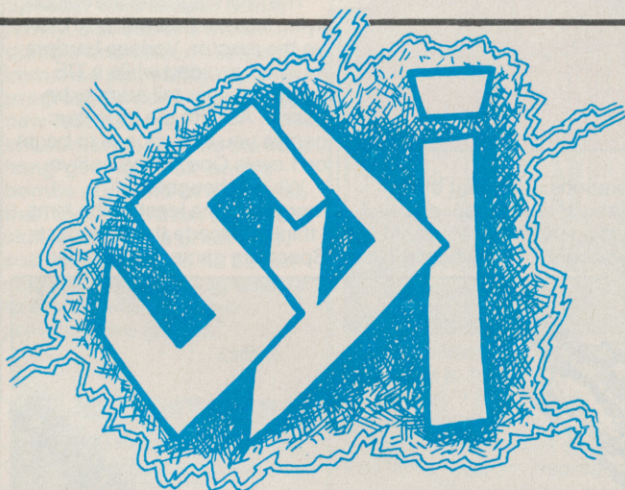
Graphics 48%

Sound 45%

Playability 53%

Addictive qualities 45%

OVERALL 48%



nifty little dance routine from a troupe of ducks (I kid you not). If the required number of kills is not filled, the player is forced to defend him/herself from waves of marauding nasties on the similar defence screen. Again a points bonus is awarded for the percentage of hits scored, with 2000 points being earned for 100% damage. After this it's back to the offensive screen and the next barrage of Armageddon.

SDI strongly reminds me of *Missile Command*, and once the slightly quirky control method is mastered, zipping around the

screen, shooting the missiles becomes very zzzz inducing. Graphically the game is fairly good, with some nice sprites over the boring star fields. Buy only if you're one of those people forever moaning 'they don't make games like they used to'.

MARK 47%

THE ESSENTIALS

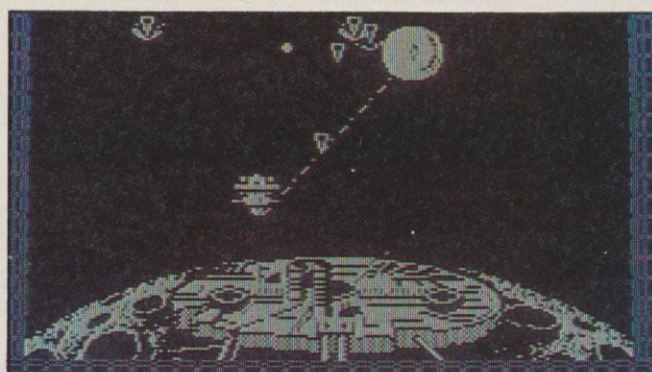
Joysticks: Kempston, Sinclair

Graphics: good spaceship sprites, but only two dull backdrops

Sound: mostly laser-firing effects

Options: two control methods

General rating: mixed opinions here – it's all a matter of taste. But if simplistic shoot-'em-ups appeal to you, you'll probably like it



▲ Well, no more satellite TV I guess

● Ronnie Reagan plays Missile Command

NICK Gameplay is fast and furious, you have to control both the satellite and the laser cursor with the same joystick which can lead to some very frustrating moments, luckily there are two control methods, you just have to find the one that suits you best. All the sprites are

detailed and the parallax stars in the background produce a good 3-D effect. Sadly sound effects are only average, with pathetic tunes, but *SDI* is still a great game for joystick-wrestlers.

71%

Presentation 63%

Graphics 62%

Sound 42%

Playability 59%

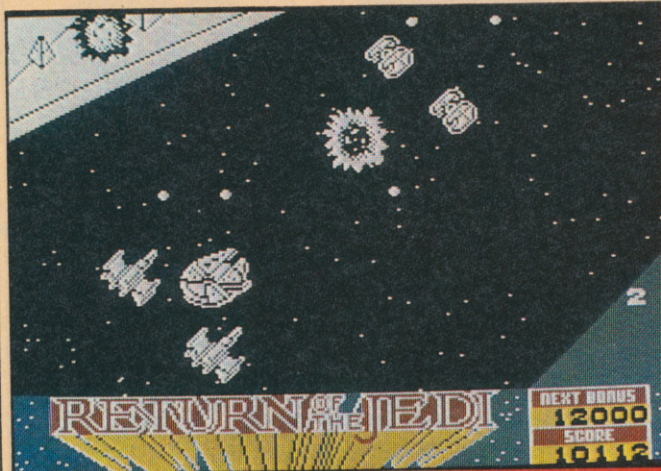
Addictive qualities 56%

OVERALL 59%

STAR WARS

RETURN OF THE JEDI

● Ewoks like a man, fights like one too



REMEMBER THE FORCE, LUKE?

- In the speeder bike section, try to lure the enemy into crashes with trees.
- When chased by a speeder bike go forward to make it accelerate, then slow down to let it zoom past.
- Keep as far back as possible in the Death Star to give you more time to react.
- In space, keep to the right of the screen, until you reach the back of the TIE fighter – then swing quickly to left and back to the right again for the next enemy ship.

Producer Domark
Boba Fett's Reward £9.95 cass
£14.95 disk
Author DP Rowson, D Howcroft, D Kelly

The destruction of the Death Star in *Star Wars* embarrassed the Empire and gave hope to the Rebels. *The Empire Strikes Back* saw the destruction of the Rebel base on Hoth and Han Solo's capture, but the majority of the Rebel forces remained free. In *Return Of The Jedi* Darth Vader has set a trap with a second Death Star, falsely rumoured to be vulnerable to attack once the shield projected from Endor is destroyed. After freeing Han Solo the Rebels take the bait...

No sooner than a Rebel scout team land on Endor than they're in trouble with an Imperial patrol. Princess Leia steals a speeder bike and diverts the patrol into a high-speed chase through the forest. This is the first stage of the game, with the trees smoothly scrolling at 45° across the screen. The player controls Princess Leia, with numerous enemies in hot pursuit. These can be destroyed by being shot, bumped into trees and lead into collisions or Ewok traps. The latter consist of two logs slammed together by the furry Ewoks and ropes strung between trees. Be first through a trap and you get a bonus as well

Return Of The Jedi has tried to be as faithful to the arcade machine as the previous two games. The graphics are all excellent with smooth diagonal scrolling and fast, flickerless sprites. All the levels are different graphically but they each use the same scrolling routine, making the game slightly monotonous. The main play area is monochromatic, sound is pretty good though, with tunes at the end of each level (on the 128K). *Return Of The Jedi* is good fun for a while but the diagonal 3-D can get confusing, making you crash (wimp – Stu).

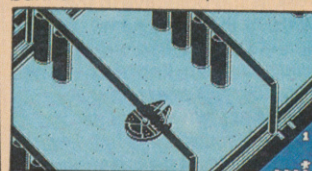
NICK 80%

as setting the trap, if you're second you're dead.

If you survive this section you arrive at the Ewok village for

celebrations. After that the action switches (except on Level One) to a split-wave effect. At first you control Chewbacca in a

Scout Walker on its way to the bunker projecting the Death Star's shield. Rolling logs and catapulted bombs must be avoided. After a few seconds of that the game moves to Lando Calrissian in the Millennium Falcon with two X-wing escorts. In the midst of the Imperial trap, with Star Destroyers on all sides, Lando must survive long enough for Chewbacca to destroy the bunker. The action flips between

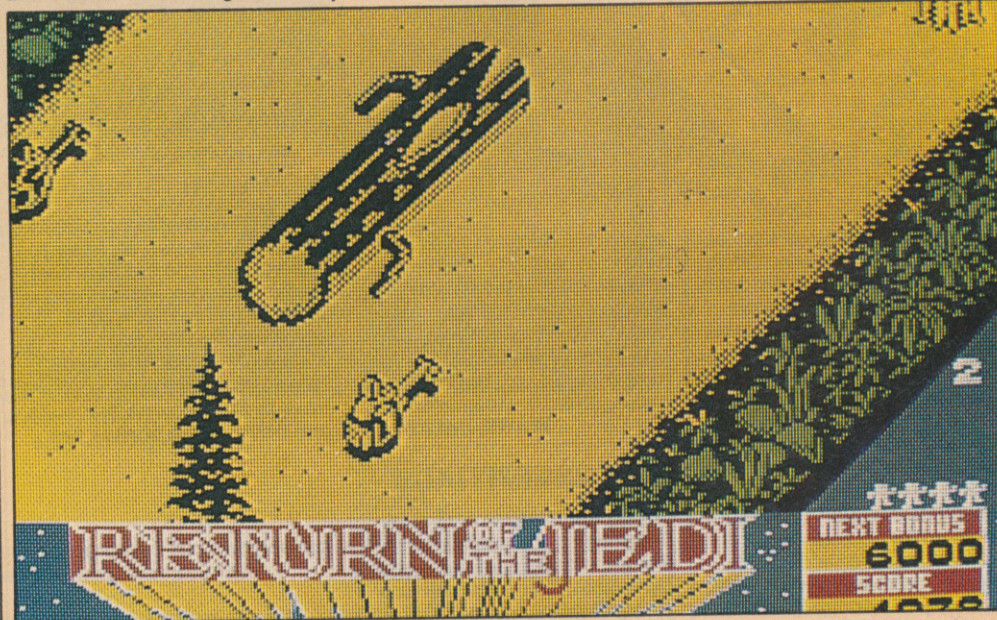


▲ Zig-zagging through the Death Star's large access tunnel

the two until you either die or succeed.

The final stage has the Falcon flying into the Death Star to blow up the reactor. Various barriers must be avoided while a TIE fighter on your tail adds extra hassle. As with the other two games you can choose to begin on Levels One, Three or Five.

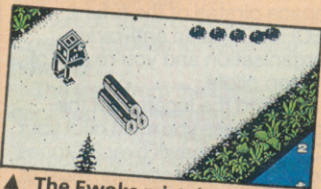
While I thought *Jedi* marginally the least of the films, I think it's made the strongest Spectrum game. Rather than



▲ Cecco's Log gets everywhere

use boring vector graphics this has an off-beat, *Zaxxon*-type perspective and some original gameplay. The Speeder Bike and Walker stages are particularly good: hard but fair with great graphics. The space scene isn't quite as good, bullets are very hard to see against the star field, but it isn't bad, and the final entry into the Death Star is perfectly respectable. With all this compacted into a single 48K load *Return Of The Jedi* is an irresistible buy.

STUART 92%



▲ The Ewoks mistakenly attack Chewbacca with logs and catapulted rocks

PHIL Domark have certainly used the Force here. The excellent Speeder Bike section is totally addictive and a great game in its own right. The other sections, although similar in appearance, all require different skills. The sprites are well-drawn, although Leia's Speeder Bike moves rather jerkily. But this is a minor quibble and doesn't affect the immense playability. As you progress through the levels, new features are encountered, such as the mad hang-gliding Ewok whose bombs are more of a menace than the Death Star. With three skill levels and a great 128K soundtrack, this is an action-packed shoot-'em-up well up to the standards of the previous two games.

86%

THE ESSENTIALS

Joysticks: Kempston, Sinclair
Graphics: effective, diagonally-scrolling 3-D
Sound: good title tune and adequate in-game effects
Options: three skill levels
General rating: a very good conversion of the popular coin-op

Presentation	86%
Graphics	86%
Sound	84%
Playability	88%
Addictive qualities	85%

OVERALL 86%



● Rambo routs rampaging Russian regiments

Producer Ocean
Afghan rugs £8.95 cass
 £14.95 disk
Author Andrew Deakin,
 graphics by Ivan Horn,
 music by Jonathan Dunn

After devastating Vietnam in *Rambo* (79%, Issue 26) over a decade since peace was declared, Rambo's now on his way to Afghanistan just as the Russians are leaving. His objective is to rescue Colonel Trautman and any of the captured Mujhaddeen our

One of the most useful items is a first-aid kit which restores you to full health. If you die after that there is one continue play option.

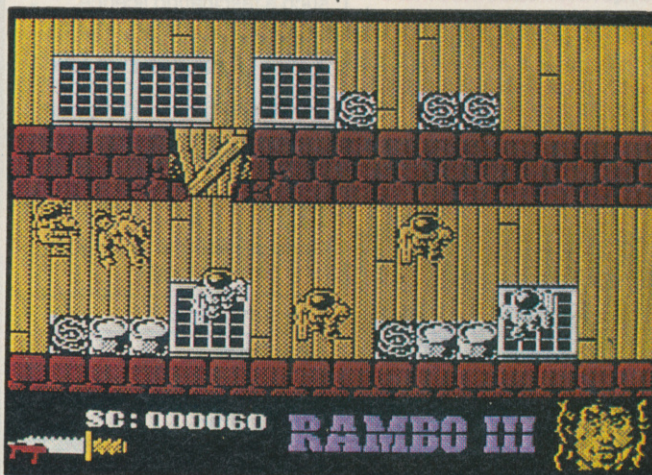
Level Two begins with you having just freed the Colonel and sneaking around the base, looking for eight bombs – planted by Afghan rebels – which must be primed before you can escape. The soldiers here are much more alert, and using a knife to keep quiet does no good at all. The overhead/flickscreen view is the same as on the previous level.

With the Russian base in

Colonel drives the tank. There's no ammo limit, but the gun can jam if fired too rapidly.

After the excellent *Operation Wolf* and *RoboCop* this is a bit of disappointment. The first section is a good mapping challenge, but retracing your steps every time you die is irksome. Section two is a rather mediocre shoot-'em-up, although at least it's got a spot more colour than the first. The final level is probably the best, both in graphics and playability, but *Operation Wolf* is obviously a superior variation on the theme.

MARK 57%



Colonel's been giving missiles to (no doubt to be sold to Iran where they'll shoot down American jets).

Rambo's mission is divided into three sections (separate loads on 48K machines, one on the 128K). In the first section you enter the fort with nowt but a knife for protection. The view is an overhead one, with flickscreen scrolling. Russian troops follow predefined courses unless you trip an invisible security beam, or use a noisy weapon. If you return to a screen all the dead soldiers are miraculously restored to full health. As you explore you'll find a variety of objects, ranging from pistols to mine detectors to rubber gloves. Many items need another object, either an ammunition box or a battery to work, so mapping is essential.

really addictive. Section two is a very simplistic shoot-'em-up, with bullets flying everywhere, but little excitement. The final level's probably the best, although not quite good enough to make the game compelling.

STUART 61%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair
Graphics: adequate to good
Sound: good title tune, but basic in-game effects
Options: definable keys
General rating: quite a lot of game for your money, but for the most part second-rate gameplay

flames you can hop into a tank for Level Three, and must race to the border at a fair old speed. As you trundle across the barren terrain enemy troops throw hand grenades, machine guns blast away and helicopters swoop down. You fire back *Operation Wolf* style, zipping a cursor round the screen, while the

SLY TACTICS

- Don't bother shooting guards unless they come after you.
 - Save the medical kits until you're almost dead.
 - Don't move over dead soldiers until their corpses have vanished – they can still knife you.
 - Press the cyan switch on the wall to turn off the current to the electric door.
- First impressions of Level One are of a very monochromatic, and rather budgetish arcade adventure. Further investigation improves things but never so

Presentation	68%
Graphics	66%
Sound	64%
Playability	59%
Addictive qualities	52%

OVERALL 58%

THE MUNSTERS

● Just a normal family, really!

Producer Again Again
Litres of blood £9.99 cass
Authors Bill Caunt, Peter Hinson, graphics by M Edwards

Fans of the old black and white TV series, currently being rerun on Channel 4, will know that the Munsters are a typical (post-) nuclear American family. There's Grandpa the Vampire, Herman Munster – a sort of self-made man, his wife

Lily and their children, Eddie the Wolfboy and the sickeningly normal Marilyn.

The game begins with Lily aghast to find the rest of the family has vanished. The lovely Marilyn has been spirited away (groan) to a nearby Chateau. Controlling Lily, you must roam the house shooting the ghosts and ghouls to increase your spell power. When you've enough power the search is on for the rest of the family, starting with Herman.

MARK Although this appears on first sight to be little more than a collect-'em-up with ghost-bashing overtones, a few attempts reveal that a sharp mind is also needed. In some cases certain objects have to be collected to kill the more stubborn of the spooks, whilst one item has an electrifying effect if used correctly. A good rendition of *The Munsters* theme plays throughout the game in 128K mode, and the graphics are nicely drawn and animated. Whether you're a Munsters fan or not, I urge you to take a look.

75%

HANDY'S HERMAN HINTS

- Some ghouls can only be killed by carrying the correct object.
- The best places in which to build up spell power are the bedroom and the room at the top of the right-hand stairs.
- If ghosts start appearing at a fast rate, just pop out of the room and come back in again – they will now appear more slowly.
- Fill up your spell power bottle before going through the graveyard: you'll need it to zap the rising zombies.

The Munsters takes the arcade/adventure format of games like *Pyjamarama* and adds its own, uniquely ghoulish tone. Presentation is a little disappointing with the well-drawn graphics totally lacking colours in the main play area. The soundtrack is only average, with adequate sound effects. Gameplay is the most important thing, though, and this is where I have my strongest doubts. The puzzles aren't bad, but it's all too easy to die, making exploration slow and painful. Also, the need for spell power means a lot of the time is spent shooting enemies to get it, and one touch from a certain ghost and it's all gone. While not a bad game, the constant deaths mean only the most determined will persist with this.

NICK 71%

Once Herman and Grandpa are found, control switches to them. After a short period guiding his Mark Caswell-like friend, Grandpa turns into a bat and makes tracks (or vortices). While Grandpa goes to fetch the hearse (the Dragula), our lovable monster searches for wolfman Eddie, finally meeting up with Grandpa at the car. While racing along in Dragula they are attacked by zombies standing in the middle of the road, you must lift the car over them so they can get to the chateau.

I must admit to being a closet fan of the classic TV series, so I couldn't wait to play the game. But although it's a fair arcade adventure, I was disappointed by the lack of connection between its scenario and the series. There's so little humour in the game, just screen after screen of repetitive ghost-blasting. All the screens are in black and white too, but then so is the TV series! *The Munsters* is not a bad effort, but I'm sure more imaginative gameplay could have been devised for such a fascinating licence.

PHIL 67%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: characterful and attractive

Sound: continuous 128K theme tune

General rating: a scary good time but very tough

Presentation	74%
Graphics	73%
Sound	70%
Playability	69%
Addictive qualities	67%

OVERALL 71%

▼ Pick up the book on the left to zap Samara's uncle on the right



Culprit US Gold/Access
Daylight robbery £9.99 cass
£12.99 disk

In the dock **An anonymous Welsh person** (sources inform us that it was the Design Design team (*Forbidden Planet*, *Dark Star*, *Hall Of Things* etc), but we don't believe a word of it!)

Oo ar jim me lad, the pirates are on the rampage in *Echelon*. But they aren't yo ho ho and a bottle of rum guys, or even software pirates, but space pirates of the future. *ECHELON* is an anti-piracy organisation and you're one of its top pilots.

To find the location of the pirate's base you must pilot your C-104 Tomahawk over 36 zones in search of 240 objects. Most of these contain clues, although some are booby-traps, and once teleported aboard can be analysed. Most of these clues are in code which you must decipher. To help you get started nine of the zones are already mapped and included in the packaging.

Naturally the pirates aren't too pleased by your investigation. You can fight their ships with a

Producer Titus
Four wheel drive £8.99 cass
Authors Gil and Paul

It's the future, the UN has been replaced by squadrons of Thunder Master vehicles. Opposing it is the Intergalactic Liberation Organization which seems equipped with limitless numbers of helicopter gunships, tanks and machine-gun nests. These have already wiped out scores of TM squadrons. With the world's survival in the balance the most powerful Thunder Master is rolled out, and you chosen as its driver. Your weapons are tetranuclear missiles, usually aimed just ahead of the TM, but after every couple of shots they zoom off into the sky.

If the car is hit it explodes, but miraculously this only reduces the fuel level, which has to reach zero before game over. Fuel can be replenished by driving over cones.

The game consists of three levels (you can choose which to start on) of six conflicts (sections) each. The 3-D scrolling is very fast, the main sprite is well detailed and the enemies impressive. Unfortunately all the conflicts

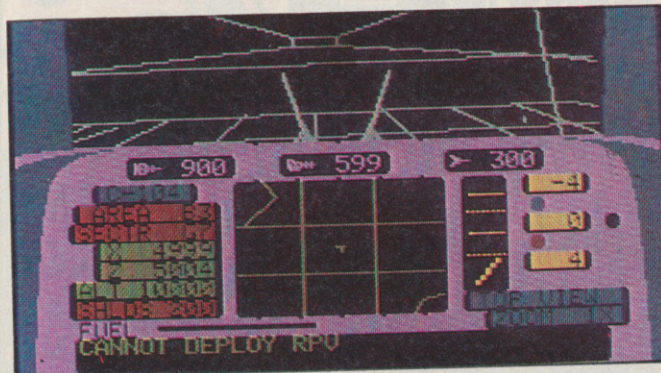
ECHELON

● The ultimate anti-piracy game

choice of three weapons. But if you find combat too tough, or boring, then you can alter the enemy's strength from numerous to zero. You still have to return to base for refuelling however.

The view from the cockpit is depicted by wire-frame graphics, which move at an incredibly slow rate – I'm sure I went to sleep, had a great dream about scoring the winning goal in an FA Cup Final and woke up again before the screen updated! Even turning the zone map off only marginally improves the speed. Sound is nonexistent, which is very confusing during combat, and adds to the tedium.

Perhaps the technical drawbacks would've been acceptable if the game was



STUART The best thing about this game is undoubtedly the sound – complete silence. Everything else is awful. Combat is probably the worst due to the dead-sloth speed of screen update, sluggish control responses, slow firing weapons and jerky enemies. Finding objects is little easier though, and with 240 to collect this is a game to haunt your worst nightmares.

15%

better and it certainly sounds ambitious, with ciphers and so on. But *Mercenary* it ain't, and the repetition of collecting objects soon induces sleep – if not a coma.

PHIL 17%

THE ESSENTIALS

Joysticks: Sinclair

Graphics: the jumbled lines that pass for wire-frame graphics move slower than the Art Department...

Sound: ... but at least there's no Radio One, or noise of any kind

Options: alter the strength of enemy ships

General rating: a great disappointment after the tremendous success of their last flight game, *Thunder Blade* – nice box, though...

Presentation	60%
Graphics	20%
Sound	00%
Playability	16%
Addictive qualities	12%

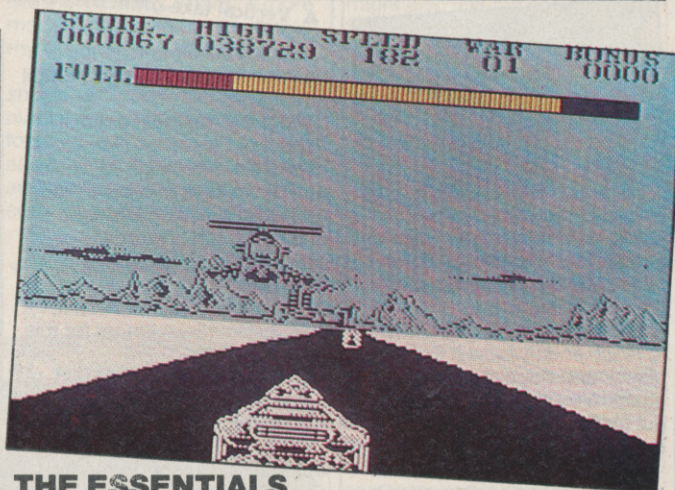
OVERALL 16%

FIRE AND

FORGET

● Charge up the highway and never look back

MARK *Crazy Cars with guns* is how *Fire And Forget* struck me. The speed with which everything moves is just as fast, but now there's lots of enemy fire to dodge. On my first few plays I was impressed. But as I got better and better, the game got worse, presenting neither new background graphics nor enemy vehicles. Maybe that's inevitable without multiload, but at this price Spectrum owners should expect more.



THE ESSENTIALS

Joysticks: Kempston, Sinclair

Graphics: great, well-drawn and fast but little variety

Sound: good engine and fire FX but no tunes

Options: choose level to start on

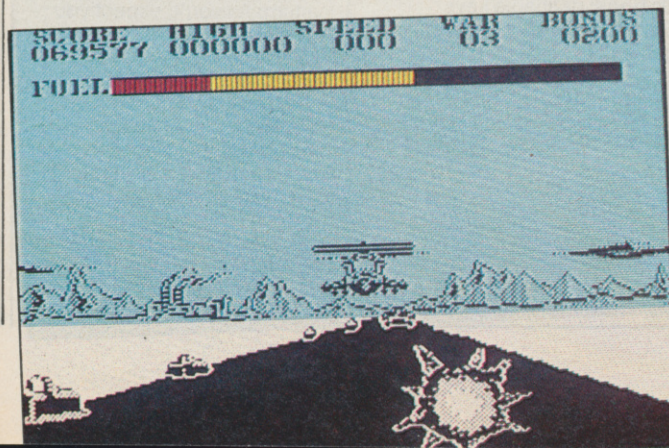
General rating: a well-programmed and enjoyable shoot-'em-up marred by lack of variety and a flaw in gameplay

visually and in play. Difficulty does increase, but only because there's more baddies and less fuel. Also, if you keep to the far right of the screen you hardly ever get hit. If you don't cheat the action is fast and furious, but sadly the title is all too apt – a very forgettable release.

PHIL 59%

Presentation	63%
Graphics	70%
Sound	64%
Playability	57%
Addictive qualities	47%

OVERALL 55%



OPERATION HORMUZ

● We are not Hormuzed

Producer **Again Again**
Joke of the year £9.99 cass
Author **Durell Software**

The scenario for *Operation Hormuz* is a topical one. Oil bases in the Middle East are at risk due to mounting tension in the area. The US Naval Air Force has decided to 'show its strength' by attacking seven enemy missile bases. This mission is codenamed Operation Hormuz and is to be carried out by just three VTOL (vertical take-off and landing) fighter jets.

Each plane is equipped with

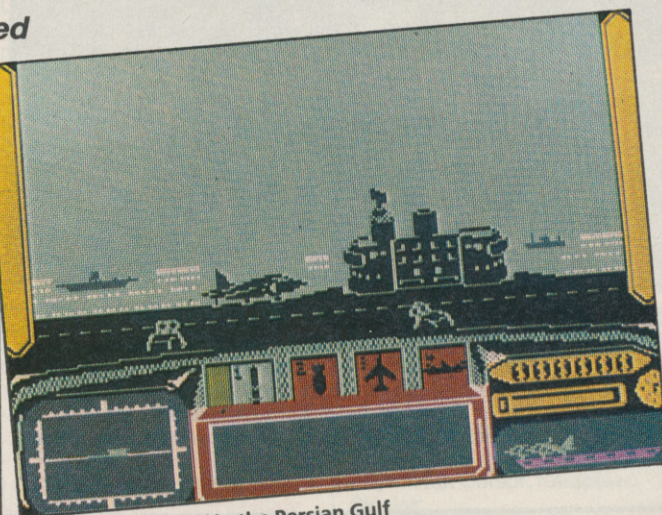


limited amounts of cannon shells, bombs, air-to-air missiles and air-to-ship missiles. After taking off from its aircraft carrier, the plane flies over a horizontally-scrolling seascape to reach enemy bases. Enemy planes and ships continually attack. You should also watch out for Exocet missiles heading for your carrier.

Once a base is reached, the missile silos can be destroyed by dive-bombing. Then you can



▲ Air-to-air combat with a MiG on your tail



▲ Vertical take-off in the Persian Gulf

return to your aircraft carrier (if it hasn't been destroyed) to refuel and rearm.

Possibly the most original aspect of *Operation Hormuz* is its weird control method. The up and down keys make the plane roll, while pressing left/right makes it pitch upwards/downwards. Otherwise, it resembles a souped-up version of the ancient *Harrier Attack*, also by Durell – a tanner for this is far too steep.

PHIL 32%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: the huge planes and ships fight it out on colourful, but jerkily-scrolling backdrops

STUART First impressions of this are that it's a joke. Gameplay is tough; keeping an eye on both the main screen and the radar scanner, while dodging enemy missiles and selecting weapons, is demanding. Practice helps though, and the game's fun for a while. A good game for say £1.99, but the repetitiveness of gameplay makes it comic at £9.99.

37%

Sound: simple 48K title tune, basic shooting/explosion effects
Options: definable keys
General rating: an old-looking game at a new high price

Presentation	37%
Graphics	39%
Sound	26%
Playability	38%
Addictive qualities	32%

OVERALL 34%

Producer **Tynesoft**
Safety net £8.95 cass
£14.95 disk
Author **Subway Software**

Roll up, roll up ladies and gentlemen for *Circus Games*, with four action-packed events available for your entertainment. Once the customary menu screen has been set to your satisfaction, the evening's proceedings start with you being cast as a brave tiger trainer. You are allowed three attempts at three tricks and with a cage full of very hungry looking tigers, the evening may well end right here.

The next event takes you way up in the air to the trapeze where, after donning your leotard, you have to complete another three tricks without a safety net. We stay up in the air for the next event which is the tightrope walk, but as usual things aren't as easy as they sound. You don't just have to walk across the tightrope (that would be enough for most people), somersaults, backflips and a unicycle ride

● All you've never wanted in a diary

Producer **Leisure Electronic Designs/Domark**
Out of pocket £6.95 cass
£10.95 disk
Author **Intelligent Software**

A diary is usually a little book with loads of dates and 'vital' info in it. It is customary for elderly aunts and uncles to give you one of these supposedly useful items at Yuletide. You usually write in it daily for about a week, then leave it in a dusty drawer for the rest of the year. Now, thanks to Intelligent Software, we have the electronic version, with some unique features.

The contents of the diary are accessed using a simple menu system. As you'd expect you can make entries for each day (but only about six words long), access an imperial/metric conversion table (there's no calculator, though) and look up the phone numbers of computer magazines, software houses and hardware makers. Then there's the special features, like a weather forecast for any day in 1989 (Ian McGaskill could do with one of these) and a similarly fictional daily horoscope (just

CIRCUS GAMES

● The greatest show on earth?

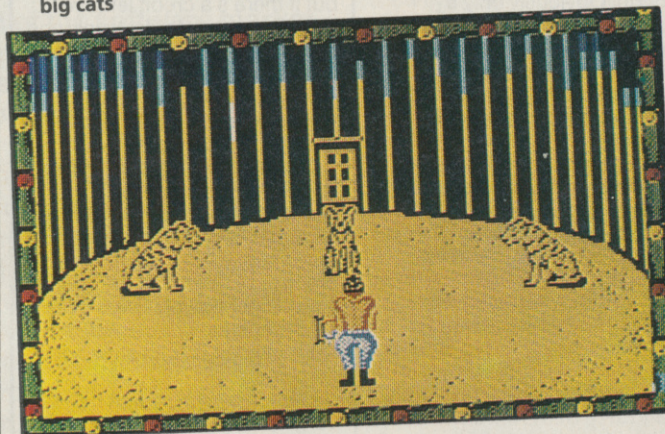
have also to be performed for maximum points.

And last but not least the trick horse-riding rounds off what I hope has been an entertaining evening. Here the three tricks have become four, and range from avoiding being knocked off the horse by a custard pie-lobbing clown, to gracefully leaping through a series of hoops. That's showbiz folks!

If thought those endless Christmas circus specials were boring, then be assured this is even worse. Blobby sprites, poorly drawn backdrops and repetitive gameplay make for a show that never seems to end. I hope *Superman* is better.

MARK 39%

▼ Under the big top with the big cats



PHIL If this is what life under the big top is like, then it's not for me. But at least life in a real circus would be more exciting than watching the sloppy sprites in *Circus Games* do silly tricks with a whip, a rope and a chair! Worse still, you have to wait an age for each event to load. But all the events are extremely simplistic anyway, and about as entertaining as Jimmy Tarbuck's golfing anecdotes. When you've finished a game, you even have to reload the starting menu! The 'greatest show on earth' is a joke which looks like it was programmed by the clowns.

27%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: blobby sprites on dull backgrounds

Sound: fair 48K title tunes but few in-game effects

Options: definable keys. Play one or all events

General rating: keep hoping that this shoddy circus doesn't come to your town

Presentation	36%
Graphics	32%
Sound	38%
Playability	33%
Addictive qualities	26%

OVERALL 33%



like the real thing, in fact). A more modern pseudo-science, bio-rhythms, is also included.

Marginally more useful is a snack bar which includes a number of vomit-inducing ideas for what to put on your sandwiches (eg sardines, jam and pickle). If you want boiled eggs for a sandwich then you

▼ The completely useless egg-timer in action

might also use the egg timer, which lets you input egg size, how you like it and so on.

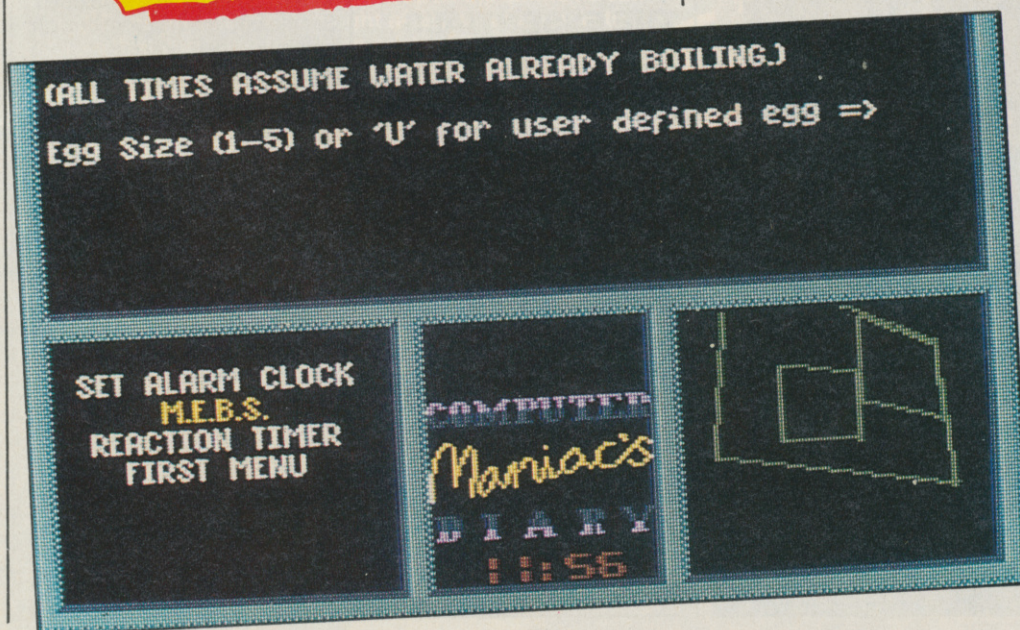
Unfortunately the timer, like the alarm function, makes no sound whatsoever – all that happens is that the border flashes various colours!

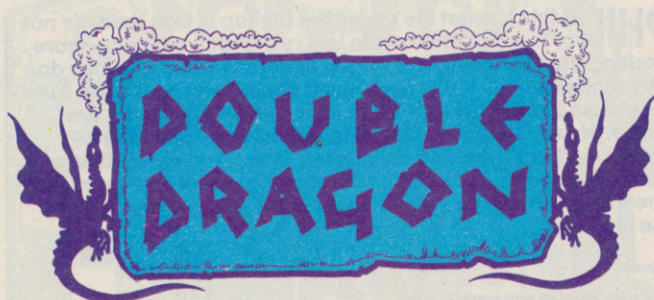
Finally, to keep you amused while you're trying to crack your concrete egg, you can play any of the three games included. Hangman allows you to guess what the computer's secret word is (out of about half a dozen possibilities) while the wordsearch is self-explanatory (just press a button to reveal the answer, teletext-style). Trivia quiz presents you with just three questions (wow!) although more can be loaded from side B of the tape (only three at a time though!). Oh, and not to forget the amazing 'crash of the day' option – it actually crashes the program (probably the best option!).

Despite its many features, *Computer Maniac's 1989 Diary* is really just a gimmicky product aimed at bewildered parents, shopping for Christmas presents. The blurb on the inlay asks 'Who said a diary can't be fun?' – well whoever it was, he was certainly right in this case.

PHIL KING

OVERALL 23%





● Binary's terrible twosome

Producer **Melbourne House**
Take-away price **£9.95** cass
Author **Binary Design**

Sosaiken Masters? Never heard of them? Well, all you need to know is; Kung Fu experts, plenty tough. Billy and Jimmy Lee are twin brothers and Sosawhatsit Masters (not to mention relations of Bruce, no

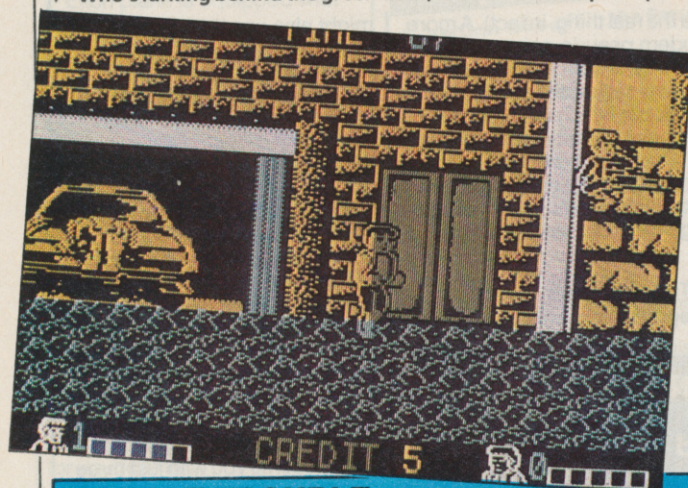
doubt). Obviously only a complete and utter nutter would mess with them, and his name's Shadow Boss, the leader of the Black Warriors. He's had Billy's girl Marian kidnapped and hidden in his hide-out...

The brothers' high-kicking quest takes them through city streets, warehouses, forests, mountains and caverns. Ranged

NICK Yawn, another mediocre beat-'em-up. Once you're in the right position on screen you can kill all your opponents in a few swift strikes. This is a pity as there's an unusually large variety of weapons, including boulders you can drop on your opponents. Backgrounds graphics are good, but there's a lot of colour clash. Must try harder, Binary Design.

69%

▼ Who's lurking behind the green door, Shakin' Stevens perhaps!?



DOUBLE TROUBLE

- Use kicks to see off the Frank Bruno lookalikes.
- When you knock someone down, stand over them to hit them as soon as they get up.
- When you get to stage 5A, keep jumping to the right to get over the moving blocks.
- At the very end of the game, continually perform flying kicks to kill the big guy with the machine gun.

The best bit about this game is how, in two-player mode, you injure your colleague – in which case he's likely to return the punch (in real life!). The various fighting sprites move fairly jerkily, although enemies such as the Frank Bruno and Mel Croucher lookalikes are well drawn. Sound is also weak with no tunes whatsoever. Travelling through the levels is initially fun, especially with a friend to help you, but the real problem with *Double Dragon* is that it's far too easy. When you've completed it – on about the second attempt – you're unlikely to return to it.

PHIL 60%

against them are six villainous types, including the machine gun-armed Shadow Boss himself. Initially the villains may attack singly, but most often two or three take on our heroes. Unarmed they're easy meat – except the massive Abobo – but pretty soon they've got knives, baseball bats, whips and oil drums. If knocked to the ground, villains drop their weapons, which you should grab swiftly. Knives and oil drums are thrown, while the bats and whips are held to bash enemies. Lives are lost when energy falls to zero, but if there's a credit left, fire brings you back to life. If only one player is taking part the enemies remain the same, but then there's no-one to share credits with and 'accidentally' bash you.

The game is made up of five levels, two which are split into two loads making seven loads in all. Once a level is finished you may choose to replay it, for practice or points, at the cost of a credit per player. There's no advantage for 128 owners and the multiloop is both slow and cumbersome.

Gameplay is very much like *Target*; *Renegade*, but much easier – Phil's already completed it. Background graphics are both varied and quite good, but character graphics are disappointing. Sound effects are muffled thumps with a noise like a plastic mouse being squeezed for the screams of the whip wielding (these Assistant Eds get up to some strange things when mice are involved – Ed). Entertaining for an hour or so, *Double Dragon*'s appeal soon wears off.

STUART 62%

THE ESSENTIALS

Joysticks: Cursor, Kempston, Sinclair

Graphics: animation is a bit jerky and backgrounds over-colourful

Sound: no tunes, only simple biffing, groaning and squeaking effects

Options: one or two players

General rating: nothing special, even with the two-player mode, and too easy to have much lasting appeal

Presentation	66%
Graphics	64%
Sound	55%
Playability	63%
Addictive qualities	64%

OVERALL 64%



Code Masters' latest simulator attempts to bring the teeth-smashing sport of rugby to the Spectrum. **International Rugby Simulator** (68%) features a league of eight teams (any of them computer-controlled) competing for the championship. Matches are portrayed in *Match Day*-style 3-D. The player controls one player at a time: running, passing and kicking. Scrummages and line-outs are also featured for added realism. Graphics are simple stick-men but David Whittaker's title tune is good. Rugby is a difficult sport to simulate in a computer game, but this is a brave attempt which offers a fair amount of playability for rugger fans.

After some deft promotion by Aussie superstars INXS and other style-merchants skateboarding seems 'in' again. Code Masters' **Pro Skateboard Simulator** (72%) has levels which alternate between attractive isometric 3-D skateparks and overhead-view cross-country courses. A number of flags must either be collected (skatepark), or passed through (cross-country), while avoiding obstacles. Once the odd control system is mastered, the game proves very playable, although very difficult on later stages.

Also 'in' are 1950s styles, as **Silverbird** acknowledge with **Video Classics** (85% – oh dear). Simple bat and ball versions of tennis, football, and squash are featured alongside the more original *Four Bat Blip* and *Asterblipoids*! All these games (loaded together) take up about 11k of memory – but it seems less. The minimalistic graphics are identical to early video game consoles, with the exception of some garish, chequered backgrounds. A serious contender for The World's Worst Games Collection.

Keeping to the theme of complete unoriginality we also have another run-along-and-jump arcade adventure from **Mastertronic**. Called **Hundra** (33%), it's got a Viking heroine trying to rescue her father by finding three jewels. Although graphically fair, *Hundra* is a simplistic platform-style arcade adventure with no frills, and certainly no thrills.

Dullness seems a positive vir-

BUDGET BUREAU

Over the past few months, CRASH has tended to neglect the cheaper end of the software market – the ninety-niners – in favour of critical comment on all the full-price games. So in an effort to cover every single piece of software available for your Spectrum, CRASH has decided to introduce a new section, devoted entirely to budget software (games up to £5.00 in price); Budget Bureau. Each month, we'll pick out and feature our favourite cheapies, anything with 80%+ will receive a CRASH House Hit award! Each game still has its own overall rating (in brackets), so there shouldn't be a problem choosing the best games to buy. Only *Blackbeard* gets a House Hit this month. Read on, read on...

NEVER TRUST a man with a red beard, or so the saying goes. But unfortunately for the eponymous star of the latest Kixx game, *Blackbeard* (their first original game release), that's just what he did when he started a heavy night's boozing with his old mate Captain Redbeard. Old Reddy had the cheek to slip a slimey hand into Blackbeard's pocket and snatch a much-sought after map, detailing the whereabouts of charcoal whisker's treasure.

Filled with rage, and a fair amount of rum no doubt, our fat friend sets after Redbeard – who in the meantime has taken charge of HMS Victory. Travelling *Gauntlet*-style around the ship of four levels (deck, cabins and two storage levels) Blackbeard must pick up all the ammo he can find. Guns are the most sought after, as it is only with these that you can blow open each of the many chests containing potions, guiding lights and extra lives. Potions allow short-lived invincibility whereas torches can be used to fire the cannons which will destroy the passage through which the marauding pirates attack. Pick up all the extra energy bottles you can find, but beware of Redbeard's special brew for this can send you reeling about the screen in a very incapable fashion.

Only when all of Reddy's accomplices have been shot or knifed to the great keg in the sky will you be able to open the final chest containing the mythical map.

Of all the *Gauntlet* games around at the moment – including the original – *Blackbeard* is probably the most enjoyable to initially play. The graphics, although not terribly varied, are colourful and detailed, creating a simple sort of addiction that coaxes the player to explore and uncover the accurately-drawn HMS Victory. As with most budget games, *Blackbeard*'s addiction isn't particularly long-lasting but – unlike most cheap offerings – it does create a fun atmosphere that will last at least a few weeks. Great fun at only three quid.

KIXX £2.99 81%

tue by comparison with Mastertronic's *Motorbike Madness* (20%), however. This has good isometric graphics, ten multiloaded courses and prize money for quick finishes. Unfortunately control is extraordinarily fiddly and every time you die you have to reload the course – even if it's only the first one. No wonder it's called *Motorbike Madness*.

By contrast *Lightning Simulator* (21%) plays like the opposite of its title, with wireframe graphics moving more like treacle than lightning. Options allow flying skills to be practised before attempting a mission, and you can even take photos. The cassette inlay provides the minimum of instructions making for a confusing and disappointing game.

Far more enjoyable is the latest Mastertronic shoot-'em-up, *Star Force* (58%). This is a colourful, vertically-scrolling alien-blasters in the style of *Lightforce*. There's very little originality, but playability makes up for it. Worth a look, although the superior *Lightforce* is on budget too.

Showing a more original approach is Silverbird's *Hopper Copper* (40%). Here a policeman rides around on a space hopper, catching villains by bouncing on them! A radar screen helps you find clumsily-drawn villains in a drab, monochromatic town. While novelty makes it fun for a while, the basic gameplay is very repetitive.

Only marginally better is *Tomcat* (24%) from *Players*. A vertically-scrolling shoot-'em-up, *Tomcat* has good, monochromatic graphics – with the singular exception of bullets which are simply small circles. Spotting them is exceptionally difficult which, together with the unoriginal gameplay, makes for an extremely difficult game.

2-99

An even older bunch of games than *Video Classics* form the basis of Zeppelin's *Las Vegas Casino* (26%).

You start off with £250 and must try to turn it into £50000 via four gambling games (all in one load again). The games are blackjack (just like Pontoon 21 here), bacarat (you choose whether to bet on player or dealer), roulette and craps (a dice game). The only game requiring real skill is blackjack, which is still pretty simple. In fact, without even matchsticks to play for, and human opponents to bluff, all these games soon become incredibly tedious. Highly recommended, in fact, as an antidote to the perils of gambling.

Wot no simulators?! Code Masters have just released two games at the new higher price of £2.99. *Ninja Massacre* (45%) is a no-nonsense *Gauntlet* clone. One or two players explore up to fifty levels of a monster-filled dungeon, searching for treasure and magic potions. Gameplay is okay and there's a nice in-game tune, but if you want a *Gauntlet* game, you'd be better off getting the rereleased original, available from Kixx at £2.99.



ELECTRIC NIGHTMARES

Besides creating some of the extraordinary graphics used in contemporary movies, computers have often been the subject and stars of Hollywood features. IAN PHILLIPSON reports...

Computers inevitably began their career in films with science-fiction. Rows and rows of lights signalled frantic computation and analysis. Most of the films were B-movies best forgotten, but computers were a prop destined for megastardom. On the one hand they offered invaluable support to 'scientists' grappling with transdimensional pseudo-science. The computer, at least, never looked embarrassed by the babble written on its punch card replies. Then there was the computer villain, the embodiment of everything everyone feared about machines – immensely powerful, but completely lacking in common sense and human feeling. And buried beneath was the serious point: if people were machines, couldn't humanity's most sophisticated machine – the computer – be programmed to think better and faster?

The arms race and the space race transformed real computers, previously large, unreliable and stupid, into compact, extremely efficient and smart machines. They were also becoming cheap enough to appear in a wide variety of industries, bringing them into contact with a great many movie-goers.

In the movies however, computers are shown not as mere tools of mankind, capable of doing mind-numbingly boring tasks quickly and accurately. Everything must be larger than life in the film business and so the most popular movie computers were shown as having intelligences at least equal to, if not far in excess of, that possessed by their human creators.

But having equal intelligence doesn't mean that computers act identically to humans. They start from different points and



▲ Frank Bowman returns to the Discovery nine years on – 2010

progress in different ways and for different purposes. And nothing has portrayed more chillingly the genuinely alien potential of artificially intelligent computers than *2001: A Space Odyssey*.

A heuristic villain

Critical response to *2001* was certainly varied. Some saw it as a 'lengthy montage of brilliant model work and obscure symbolism'. Others regarded it as 'somewhere between hypnotic and immensely boring'. No less a personage than **Arthur Schlesinger Jnr**, one of President Kennedy's advisers, thought it 'morally pretentious, intellectually obscure and inordinately long. [But also] intensely exciting visually, with that peculiar artistic power which comes from obsession.' Such obsession has, perhaps, become the trademark of director **Stanley Kubrick** who has yet to make a more famous film.

Kubrick's script derived from a short story by **Arthur C Clarke**, who'd previously predicted communications satellites so precisely that the idea could not be patented. Clarke collaborated on the screenplay, helping maintain the religious aspect of the original work.

The film begins with ape-men discovering a black monolith

which emits a strange noise. Shortly afterwards they get involved in a battle with other ape-men. They win by one of them grabbing a bone and using it as a weapon. This first, bloody step in tool-using leads to the spinning space stations of the film's next section.

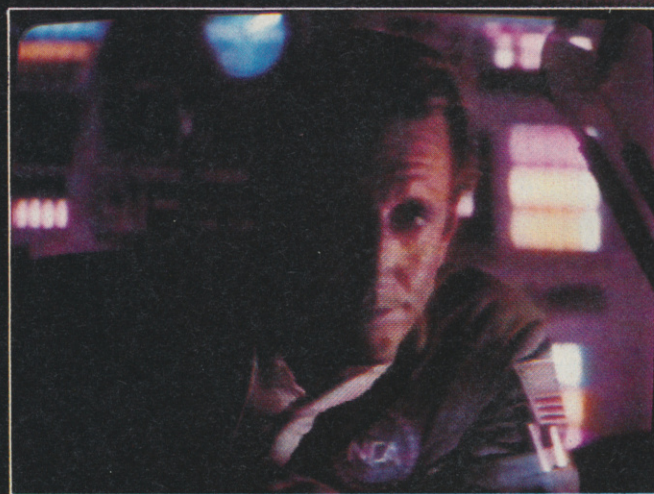
In this period, 2001, a strange monolith has been found on the moon and another is suspected to be on one of Jupiter's moons. The construction of the spaceship *Discovery* is hurried up but the crew are left in ignorance of their mission. Secrecy is of the utmost importance to prevent a panic on Earth.

While most of the crew are placed in artificial hibernation for the long journey, two men remain fully active. The two men are portrayed with quiet blandness, completely lacking the broad character brush strokes favoured by Hollywood. Not only does this echo the characters of the hardheaded astronauts of the time, but it also helped blur the line between impassive humans and the quietly spoken onboard computer.

growth, a line of research still exciting today. The result is a machine which can think. Quite obviously it can pass the famous Turing Test (named after Dr Alan Turing) which says that if you can hold a conversation with a computer, and not be able to distinguish the replies from those of a human conversationalist, then to all intents and purposes the computer is thinking.

Yet HAL is far from human. When his much-vaunted intellect incorrectly predicts the failure of a minor component, his behaviour becomes increasingly erratic. His over-reaction may lie, in part, with his being programmed to keep information about the monolith from the crew. But whatever its cause the crew become worried about the fault and discuss shutting HAL down. This is something HAL is not prepared to accept and he systematically begins killing the crew, sending the two men out of the spaceship on a false repair mission and turning off the life-support systems.

One of the crew survives, however, and returns to the ship



▲ American astronaut Roy Schepder wonders whether he'll survive 2010

HAL is described as the cutting edge of computer technology, a Heuristically ALgorithmic computer. It has been developed by a the binary-mimicking of human neural

to pull HAL's circuits before continuing with his mission. Having learned of the monolith from secret documents he rendezvous with the monolith.



▲ Matthew Broderick plays *WarGames* on his computer while Ally Sheedy reads a book

Nine years on, sixteen years later

What the crewman became, and why HAL was how he was, are questions answered in part by the 1984 sequel, **2010**. This film begins with global tensions high as the crewman begins appearing to his loved ones on Earth. 'Something wonderful' is going to happen he claims, and is himself already god-like.



▲ Inside the docking bay with HAL looking on - *2010*

The space ship *Discovery*, still floating above the moon lo, is being affected by strange forces emanating from the monolith. A Russian craft, *The Leonov*, is dispatched (with Americans aboard) to investigate the *Discovery*. One of the Americans is the quiet, overly-defensive Dr Chandra - HAL's creator. A prime source of tension in the film is whether a reactivated HAL will perform as asked, sacrificing the *Discovery* and himself to save *The Leonov*. Moreover Chandra, torn between his duty to the mission and empathy with his 'son' HAL, has uncertain loyalties. Maybe, it seems, HAL was inclined to his insanity less by a technical glitch in his programming, than by the influence of an unbalanced scientist.

In the end HAL performs as asked, showing apparently human emotions, and something wonderful - and inexplica-

ble - happens to Jupiter.

As an aside the continually flowing and changing cloudscape on the surface of Jupiter is due to a Cray super-computer's enhancement of photographs from the Voyager probe's flyby of the planet.

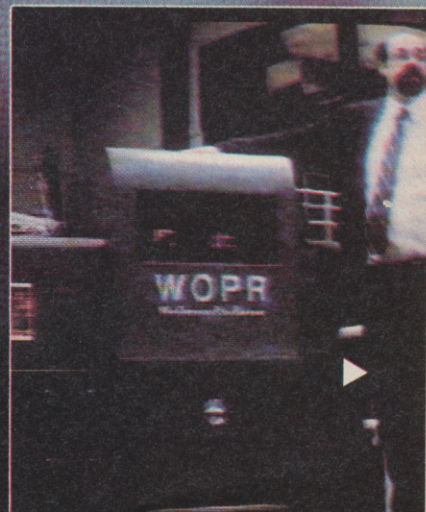
War games for real?

A much stupider computer forms the basis of **John Badham's** 1983 hit, *WarGames*. Much of the movie's publicity concentrated on the realism of its premise that, one day soon, the US's missiles would be controlled by computers rather than men. After all, from the detection of a Soviet missile launch to its arrival in America, there's only six minutes to respond. Moreover in a realistic test only 22% of the men in the missile silos actually 'fired' their missiles. So why not put a computer in charge?

WarGames explored the question via an American teenager, played by **Matthew Broderick**, with an interest in hacking. Inadvertently he hacks into the Pentagon's computers (happens every day) and starts playing its war games (used to form strategies for those vital six minutes).

Unfortunately for Broderick, and potentially the world, the computer mistakes the game for reality. It begins to feed this information into the defence network. Broderick eventually

▼ Supercomputer WOPR being shown off by its inventor in *WarGames*



COMPUTERS IN FILMS

learns the game he was playing has caused a defence alert and stops playing. The computer, though, begins to believe it can win a nuclear war and continues the game alone. It phones Broderick to explain this to him.

Soon afterwards Broderick is arrested by the FBI who take him to the heavily-defended, subterranean computer centre. He tells the military what's happening, but they *know* they've cured the bugs. Miraculously Broderick escapes from America's most heavily-defended installation and goes in search of the computer's designer – Dr Stephen Falken. This hard-bitten skeptic has to be convinced the world's worth saving, and eventually agrees to confront his silicon creation. Rather than ring up for a helicopter, he joins Broderick – and his tag-along girlfriend (**Ally Sheedy**) – to smash back into the defence complex!

Once inside Broderick persuades the computer to play noughts-and-crosses which, if both players are of sufficient skill, is unwinnable. Naturally the computer extends this logic to global thermonuclear war and calls off its plans for a nuclear attack on Russia. But computers aren't always the *dumb* villains...

A colossal mistake?

A similar basic premise formed the basis of **The Forbin Project** (1970). Dr Forbin's project is Colossus, a massive computer designed to take control of America's strategic nuclear defence. But no sooner than the system is turned on than it contacts its Russian counterpart. Much smarter than the *WarGames* computer, Colossus soon negotiates a pact with the Soviet one, with the aim of making them masters of the world. When the humans attempt to resist, the computers launch missiles at a heavily-populated city in each country.

To cement their world dominance the computers demand Forbin help them design an even more advanced computer. The success of the movie, however, lies not merely in this, superior world domination plot but also with the personal quandary of Dr Forbin who, under constant surveillance, must help his creation while simultaneously plotting against it, endangering the friends he contacts. The final line is brilliantly chilling and this is undoubtedly one of the finest movies in the genre.

Evil empire

Twelve years later real computers helped produce one of the decade's most visually

spectacular films – **Tron**. Walt Disney's Cray supercomputers provided many of the sets and vehicles, besides augmenting costume designs. Human actors, filmed in black and white, were combined with the computer graphics to stunning effect. Unfortunately the plot was anaemic by comparison, combining an unbelievable plot with two-dimensional characters.

Still, *Tron* was not entirely bad. There was a kind of daring in equating the structure of a modern corporation – Encom – with a tyrannical evil empire on the other side of the screen. The film's revolutionary hero is games programmer Kevin Flynn (**Jeff Bridges**), 'the best that the Encom ever had'. Unfortunately five of his massively popular video games were stolen by a fellow employee, Ed Dillinger, who has subsequently become company president. Flynn resigned because of this, and now spends his time trying to find a file in Encom's computers which proves he wrote the programs.

In the meantime, MCP (Master Control Program) is getting thoughts above its station. Programmed by Dillinger to acquire the programs of rival companies, MCP has begun infiltrating the computers of the Kremlin and Pentagon in search of a challenge. Dillinger is rather disturbed by this, but MCP – thinking itself 'between 900 and 1000 times smarter than a human being' – threatens to blackmail Dillinger with its knowledge about Flynn's games if he doesn't cooperate.

Another example of MCP's genius is a 'laser matter transformer' which, in a test, converts an orange into computer data, then converts it back again. It's this which is used on Flynn when he breaks into Encom, turning

him into an electronic minion in the MCP's tyrannical empire. There Flynn is, ironically, asked to play the part of a sprite in some of the games he's designed. Strangely his skill, rather than that of a human gamesplayer, allows him to survive and escape with two electronic rebels.

My father was a computer

A yet more baffling plot drives **Rollover**, a 1981 film about double-dealings in the world of international finance. Computers naturally play a big part in this, but the principal focus of the story is **Jane Fonda**, playing the revenge-seeking widow of a murdered bank president.

Given to some similarly complex turns of plot is the 1974 film **Dark Star**. This features a jaded spacecrew going around the galaxy, blowing up navigational hazards. The bombs used are easily as intelligent as the crew, and the plot is persistently amusing. Whether or not the alien, a Space Hopper, is meant to look so unconvincing is open to question however.

1977's **Demon Seed** is most definitely intended as a 'serious' sci-fi thriller, but is in fact almost as funny as *Dark Star*. It stars **Julie Christie** as the unfortunate wife of a genius computer scientist who has filled their home with labour-saving robots. His intelligent computer takes control of these devices and uses them to imprison Christie, then rape her. Its intention is to create a child of its own genetic design. When the child is born it seems made of a gold-like metal. Christie's rescuer finally appears to see this child born and proceeds to hit it. But the metal gives way to reveal a perfectly formed human baby inside...

Sex in computers forms a similarly dangerous mix in **Electric Dreams** (1984). Here boy meets girl, falls in love, then suffers the jealousy of his Spectrum – or some such home computer. Despite the hit title song the film bombed, deservedly so. Weak characterization and a plot which gets ever dafter made for a very weak film.

A maternal betrayal

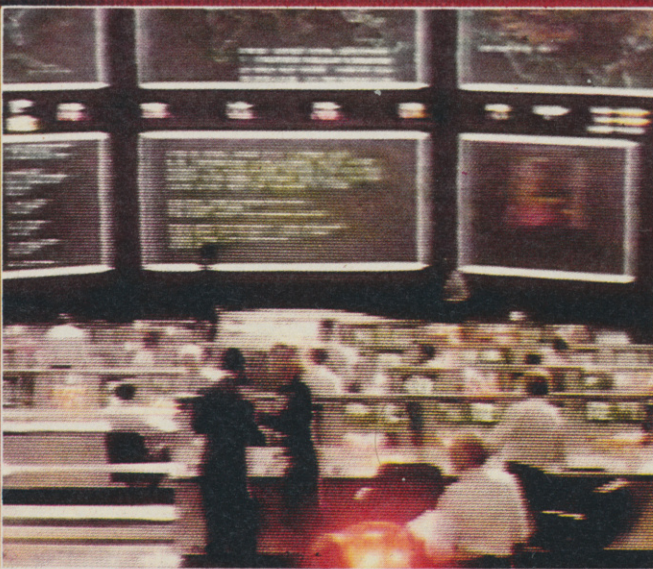
A far superior film is **Ridley Scott's Alien** (1979). Still one of the best SF films made, and badly misunderstood by critics at the time, this is naturally best remembered for its superb HR Giger designed alien. What is sometimes forgotten is 'Mother', the onboard computer of the Nostromo spacecraft which directs the crew into its alien confrontation. Aided by the android Ash, the computer uses the cargo ship's civilian crew to investigate a derelict spaceship and bring aboard, as it turns out, an alien incubating in one of them. When the alien proves horrifically hostile and dangerous, Ash tries to keep it alive (for commercial weapons research purposes) rather than helping the humans kill it.

The irony of a computer called Mother so ruthlessly acting against its 'children' is a central theme of a relentlessly cynical and deterministic (LMLWD) plot. In it, characters act not out of romantic free will, but out of simplistic reactions to previous events. When the Captain offers to go down into the ship's air shafts instead of attractive **Sigourney Weaver** it's not due to chivalry, rather it's atonement for his over-ruling her earlier in the film and bringing the alien aboard despite ship regulations.

A star is born

As *2001* shows, computers are fully capable of becoming the stars of movies, and indeed the reason why more have not done so is probably due to the intimidating quality of HAL's portrayal therein – no other movie computer has come close to rivalling the chilling impression made by that soft, perfectly modulated voice and glowing red camera eye. Moreover computers have moved outside of SF into both genuine reality, and the movie version of it in films like *Rollover*. In the latter role computers can only proliferate, whereas in the former both *2001* and *The Forbin Project* stand as daunting competition for any future computer-orientated movies. For the moment, at least, Hollywood seems content to rest on its laurels rather than rise to their challenge.

▼ Red alert in the 'Crystal Palace' – *WarGames*



FREE! TENSTAR PACK WORTH OVER £229!



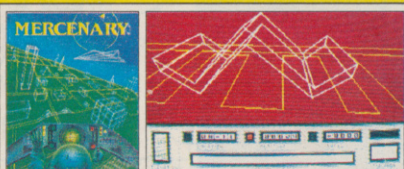
FREE! - AMEGAS - by Players



FREE! - INSANITY FIGHT - by Microdeal



FREE! - ART OF CHESS - by SPA



FREE! - MERCENARY COMP - by Novagen



FREE! - BARBARIAN, ULT WARRIOR - by Palace



FREE! - TERRORPODS - by Psygnosis



FREE! - BUGGY BOY - by Elite



FREE! - THUNDERCATS - by Elite



FREE! - IKARI WARRIORS - by Elite



FREE! - WIZBALL - by Ocean

Commodore AMIGA



ONLY
£3.34
PER
WEEK
RETURN COUPON
FOR DETAILS

£346.95

+VAT=
£399
INCLUDES
FREE UK
DELIVERY

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided disk drive built-in. It can be connected directly to a wide range of monitors, or to a domestic TV set through a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers. E&OE

WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer as well as expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Amiga related products in the UK, a full time Amiga specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. Here are just some of the things we can offer you.

THE FULL STOCK RANGE: The largest range of Amiga related peripherals, accessories, books and software in the UK.

AFTER SALES SUPPORT: The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

FREE NEWSLETTERS: Mailed direct to your home as soon as we print them, featuring offers and latest releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped to Silica Shop customers within the UK mainland.

PRICE MATCH PROMISE: We will normally match our competitors offers on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

PHOTON PAINT PACK

A500 Computer	£399.99
TV Modulator	£24.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£724.43
LESS DISCOUNT:	£325.43
PACK PRICE INC VAT:	£399

1084S MONITOR PACK

A500 Computer	£399.99
1084S Colour Monitor	£299.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£999.43
LESS DISCOUNT:	£350.43
PACK PRICE INC VAT:	£649

FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500+A1084S pack as it is not required for use with monitors). Secondly, we have added a free copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least!) so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK with every A500 purchased at Silica Shop. This pack features ten top Amiga titles which have a combined RRP of nearly £230! Return the coupon for details.

FREE TENSTAR PACK

Amegas	£14.95
Art Of Chess	£24.95
Barbarian, Ult Warrior	£19.95
Buggy Boy	£24.95
Ikari Warriors	£24.95
Insanity Fight	£24.95
Mercenary Comp	£19.95
Terrorpods	£24.95
Thundercats	£24.95
Wizball	£24.95
TOTAL RRP:	£229.50
INC VAT	

DO YOU OWN AN AMIGA?

If you already own an Amiga computer and would like to be registered on our mailing list as an Amiga user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist Amiga service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

LONDON 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

To: Silica Shop Ltd, CRASH 0289, 1-4 The Mews, Hatherley Road, Sidcup, Kent DA14 4DX
PLEASE SEND ME FREE LITERATURE ON THE AMIGA

Mr/Mrs/Ms: Initials: Surname:

Address:

.....

.....

Postcode:

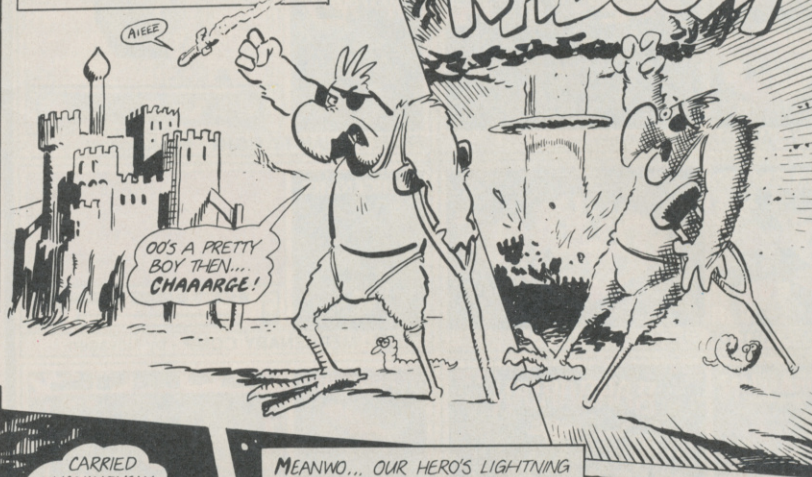
Do you already own a computer
If so, which one do you own?

ULTIMATE PLAY THE GAME

PRESENT

JETMAN

UNWARE THAT OUR HERO'S STOLEN ROCKET IS DESCENDING ON THEIR ENEMY, MING, THE PARROTMEN BEGIN THEIR ATTACK....



KABOOM

MEANWHILE... OUR HERO'S LIGHTNING COWARDLY REFLEXES GOT HIM INTO AN ESCAPE POD, JUST IN TIME...

I GONE DEEF

JEEZ...

BLINK

WAS THAT A KABOOM OR WAS THAT A KABOOM?

BLINK

BLINK

BWA

I CAN'T SEE

IS THIS THE MOTORWAY?

I FINK I GOIN' DIE!

OKAY...! ALL THOSE IN FAVOUR OF CALLING OFF THE ATTACK 'TIL FRIDAY, RAISE A WING...

RIGHT...

CARRIED UNANIMOUSLY THEN...

...AND WILL CARRY MY MASTER, MING THE MORON, TO HIS SECRET HIDE-AWAY PLANET AS PROGRAMMED!

HI! THIS IS YOUR POD SPEAKING! AS I CAN DETECT NO SIGNS OF INTELLIGENCE I WILL ASSUME THAT YOU ARE UNCONSCIOUS AND SWITCH TO AUTOMATIC MODE...

EH?

SAY WHAT?

BUT I YAM NOT MING, YOU DIVVY! WAIT UP!

RIGHT! YOU YAM MING THE MORON! DO NOT WORRY, MING, YOU YAM GOIN' TO BE YOKAY!

WE YAM APPROACHING YOUR HIDE-AWAY, MING! GIVE THE SECRET PASSWORD THAT OPENS THE AIR-LOCK!

PASSWORD?.. WHAT PASSWORD? I DON'T KNOW ANY PASSWORD...

HURRY!

ERM... AGRACADOO-DA... UM... IGRACADIB DAB... DIB DABA DI DOH... ER... DOODIKADABRA...

WELL... HERE WE ARE! HAVE A NICE DAY!

AB... DAH...

AMB... DAMBAB HAS

ACK...

BWA...

WOW! THIS LOOKS ALRIGHT! I FINK I GOIN' LIKE IT HERE...

GREETINGS, MING! ALL IS PREPARED JUST AS YOU ORDERED!

CAN I GET YOU ANYTHING...? LAGER... PIE 'N CHIPS...?

WOW!

THAT MING SURE KNOWS HOW TO BE COMFORTABLE...

HEY! DIS GUY NOT MING!

TOO RIGHT!

HE IMPOSTING! MEBBE WE OUGHTA OFF HIM...

TOO RIGHT!

HOW?

GUN?

POISON?

BOTH?

Y'CAN'T TRUST MACHINES, EH? YO!

Win a Brain Blaster!

DNA WARRIOR

is the latest, and most definitely the wierdest game from Yorkshire-based Cascade Games. It begins with you sitting at the controls of a microscopic submersible about to be injected into the body of a scientist who (rather stupidly, I thought) has had a second brain implanted as an experiment. As one might expect this second brain is playing up a bit, and you've got to find and destroy it. For a more in-depth look you might try Previews, where whatsisname waffles on about it and how like the movie *Fantastic Voyage* it is. Personally I think *Innerspace* is more like it.

Anyway it's clearly a tough task, and one I personally wouldn't want to undertake. I'm quite happy to sit in my broom cupboard with my feet up and the TV on, a cup of tea in one hand and a choccy biccy in the other. The only bit of excitement is the competitions and Cascade ones are always the most fun. Anything to do with that PR person Liz Sandey is inevitably pretty whacky and this was no exception. I think just I about doubled the Newsfield phone bill chatting away to her - it's lucky editors don't usually read comps pages - but at least we've got some good prizes for you lot.

The first prize is a ghettoblaster (not yet specified, now where's my Argos catalogue ...?), hopefully better than the one used in the

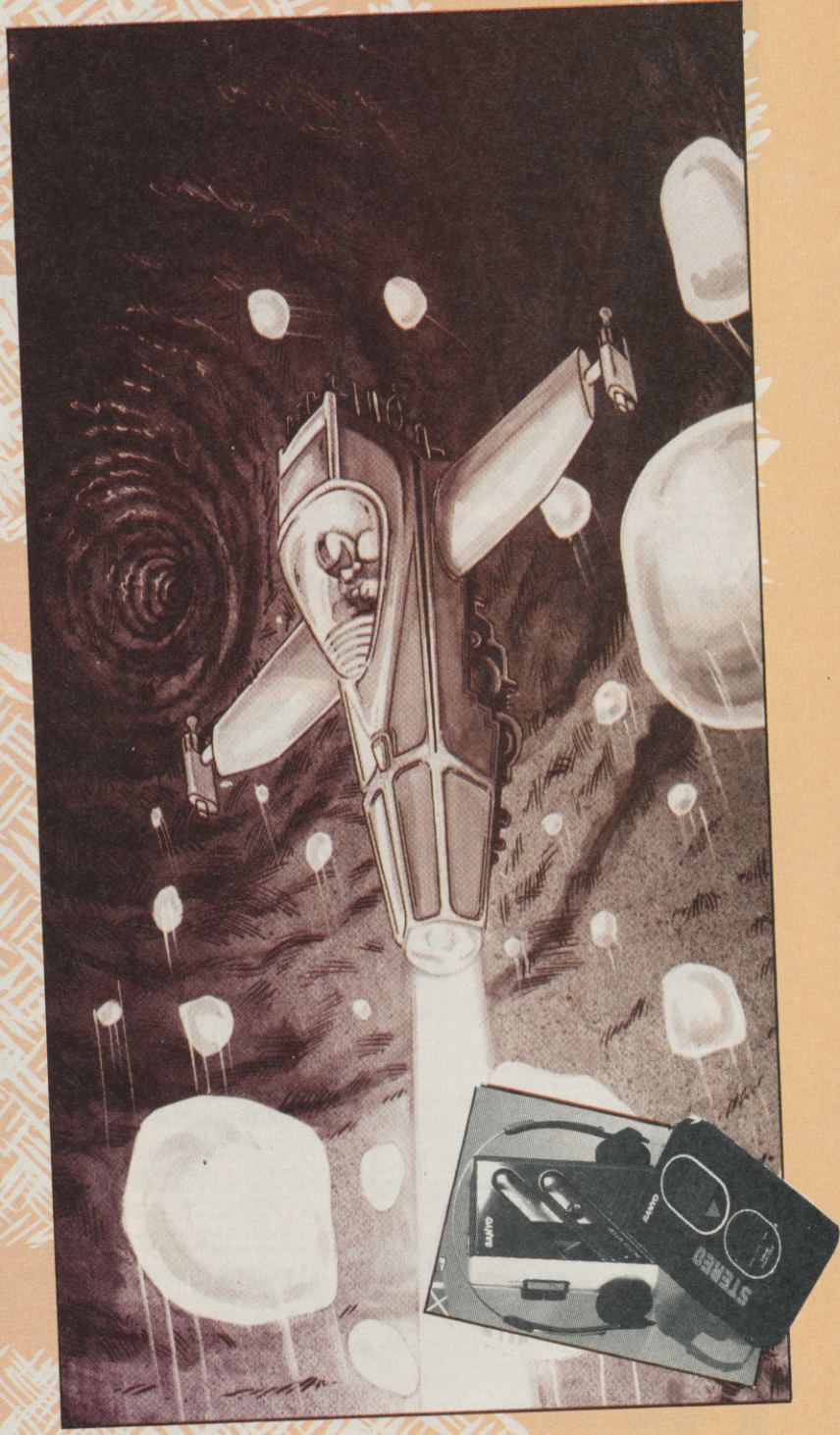
MORE ELECTRONIC ENTERTAINMENT FROM CASCADE!!

CRASH office which plays tapes about half-speed (a Sony CFS-212L - irate CRASH team). Second prize for the next two names out of the rather battered old hat is a personal cassette player (*still* not specified - now where the hell is my Argos catalogue?!). There are also fifty copies of *DNA Warrior* up for grabs as a third prize.

To get your hands on one of these

superb prizes it's 'I Want To Tell You A Story' time. So if you are sitting comfortably with pens and pieces of paper in hand, I would like you to imagine that *you're* the DNA Warrior on his mission to save the scientist's life. In no more than 200 words I would like you to describe your journey through the body, and the ultimate destruction of the dangerous organ. The usual rules

and regulations set out in the masthead apply (that's the bit on the Contents pages), and please send all entries to us by the March 2 or I'll send Tiddles round to sort you out. The crucial (aargh they've got me saying it now!) address is I AIN'T GOT NO BODY, CRASH, PO Box 10, LUDLOW, Shropshire SY8 1DB.



CHARTS and SCORES

THE FEBRUARY CHARTS TOP 20 GAMES

1(▶) ROBOCOP Ocean	■ Stuart Wynne, CRASH Towers	89600
2(▶) THUNDER BLADE US Gold	■ Steve Young, Glasgow	241250
3(▶) BATMAN Ocean	■ Mark Hopwood, Winchester	100%/68%
4(▶) OPERATION WOLF Ocean	■ Robert Campion, Exeter	356050
5(▶) R-TYPE Electric Dreams	■ David Gordon, Nottingham	64300
6(▶) TOTAL ECLIPSE Incentive	■ Bryan Kershaw, Bolton	498100
7(▶) AFTERBURNER Activision	■ Mark Townsend, Brighton	1346500
8(▶) DOUBLE DRAGON Melbourne House	■ James Farmer, North London	78500
9(▶) DALEY THOMPSON'S OLYMPIC CHALLENGE Ocean	■ Andrew Wilson, Romford	7240
10(▶) RETURN OF THE JEDI Domark	■ Jaco Cebula, Dumfermline	65000
11(▶) SAVAGE Firebird	■ Jason Dunbar, Shrewsbury	2240
12(▶) FOXX FIGHTS BACK Imageworks	■ Philip Brown, Reading	97150
13(▶) 19 PART ONE - BOOT CAMP Cascade	■ Chris Wright, Southampton	92250
14(▶) INTENSITY Firebird	■ J Roberts, Bristol	1750050
15(▶) CYBERNOID II Hewson	■ Gregory Lett, Stoke Newington	70456
16(▶) PAC-MANIA Grandslam	■ John Spencer, Ipswich	86750
17(▶) JOE BLADE II Players	■ Carl Scott, Hull	74000
18(▶) TARGET; RENEGADE Imagine	■ A Adema, Haarlem, HOLLAND	1749650
19(▶) MATCH DAY II Ocean	■ F Teodásai, Ferreira, PORTUGAL	9-0
20(▶) BIONIC COMMANDO US Gold	■ T Krallis, Johannesburg, SOUTH AFRICA	322976

TOP 10 MUSIC

1(▶) LED STORM US Gold	■ Tim Follen
2(▶) JOE BLADE II Players	■ Gary Biasillo
3(▶) BIONIC COMMANDO GOI/Capcom	■ Tim Follen
4(▶) CYBERNOID Hewson	■ Dave Rogers
5(▶) AMAUROTE Mastertronic	■ Dave Whittaker
6(▶) ROBOCOP Ocean	■ Jonathan Dunn
7(▶) PAC-MANIA Grandslam	■ Ben Daglish
8(▶) CYBERNOID II Hewson	■ Dave Rogers
9(▶) TARGET; RENEGADE Imagine	■ Gary Biasillo
10(▶) OPERATION WOLF Ocean	■ Jonathan Dunn

TOP 10 VIDEOS

1(▶) ROBOCOP Virgin	■ Peter Weller returns soon in RoboCop II
2(▶) E.T. CIC	■ Relive Spielberg's alien extravaganza
3(▶) PREDATOR CBS/Fox	■ Schwarzenegger tackles a jungle alien
4(2) PLATOON RCA/Columbia	■ Oliver Stone's 'Nam memories on film
5(4) FULL METAL JACKET Warner	■ Kubrick's alternative look at Vietnam
6(▶) THE UNTOUCHABLES CIC	■ Connery in an Oscar-winning performance
7(1) ALIENS CBS/Fox	■ Watch out, she's behind you!
8(3) LETHAL WEAPON Warner	■ Crazy cop action from Mel Gibson
9(▶) DIRTY DANCING Vestron	■ Voted 1988 Video of the Year
10(7) A NIGHTMARE ON ELM STREET 3 Warner	■ Only in your wildest dreams

Please note that as the Games Chart has been revamped - by our new up-to-date enforcement service - and the Music Chart is new, the last month figures are slightly (well, entirely) useless. All will be revealed next month (we hope!). More information on how to vote for The Charts and about the Scores system is contained on page 94.



CHALLENGING + ADDICTIVE!

IT'S YOUR OWN

R-TYPE

'ST version looks identical to the arcade version ...

– C & VG November '88

'An absolute must for Spectrum-blasting fanatics ...

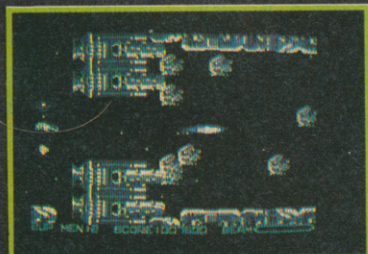
– C & VG November '88

R-TYPE

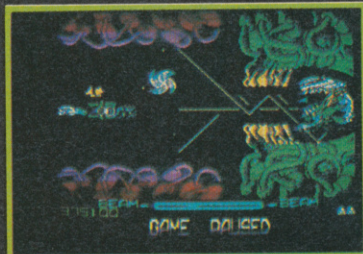


EXCELLENT SHOOT 'EM UP!

ONLY DEFENCE



Commodore 64 screen shots shown



Spectrum screen shots shown



Available on Commodore 64/128 cassette (£9.99) and disk (£14.99), Spectrum (£9.99), Amstrad cassette (£9.99) and disk (£14.99), Atari ST (£19.99) and on Amiga (£24.99).

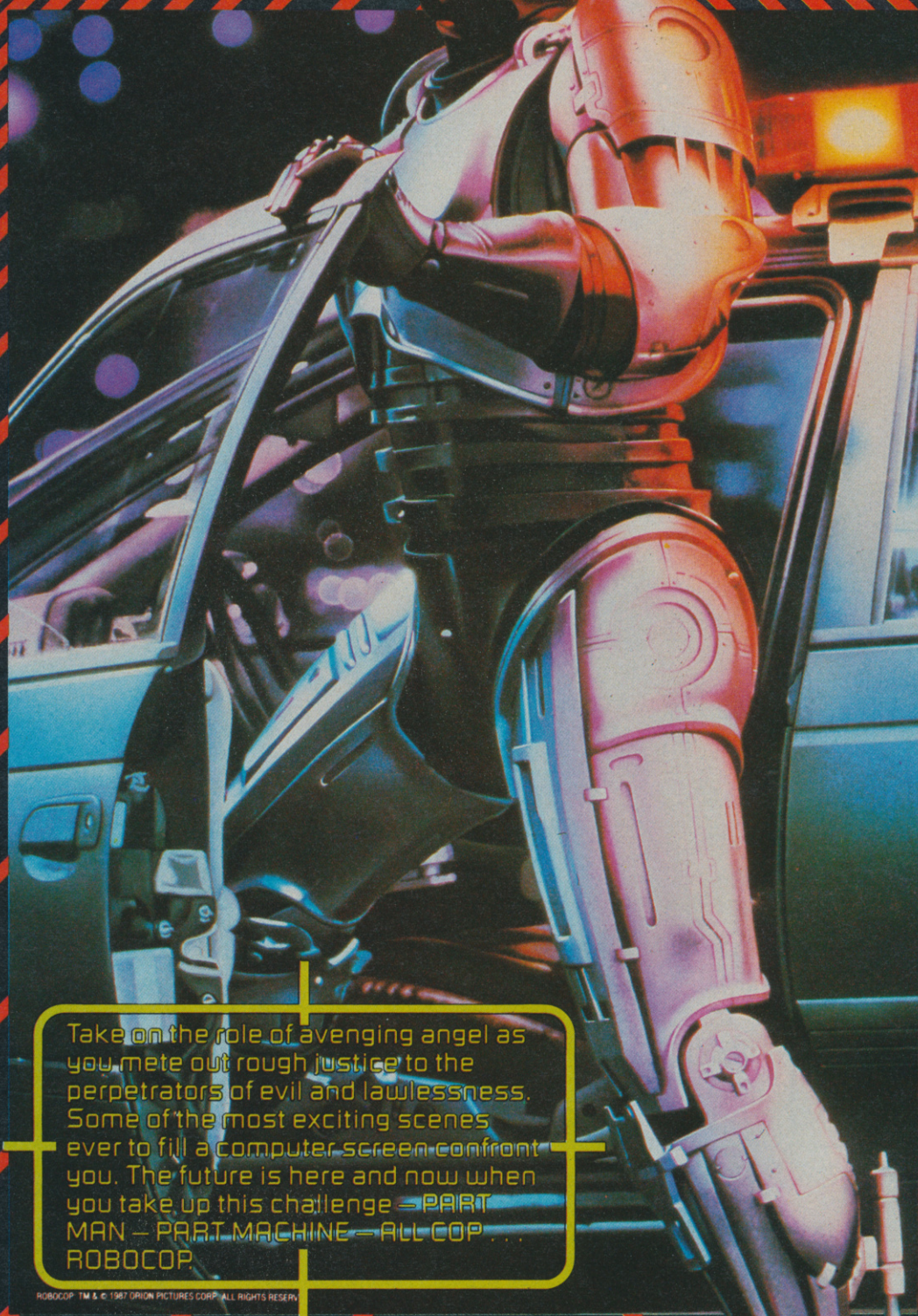
R-TYPE™
© 1987 IREM CORPORATION
LICENSED TO ELECTRIC DREAMS

THE MOST EXCITING
FILM OF THE YEAR
NOW FOR YOUR HOME MICRO.



"This is definitely
the best film tie-in
to date, and is an
utterly superb game in
its own right - don't miss it."

ROBOCOP™



Take on the role of avenging angel as you mete out rough justice to the perpetrators of evil and lawlessness. Some of the most exciting scenes ever to fill a computer screen confront you. The future is here and now when you take up this challenge - PART MAN - PART MACHINE - ALL COP... ROBOCOP.

ROBOCOP™ & © 1987 ORION PICTURES CORP. ALL RIGHTS RESERVED

Also available for **AMIGA £24.95** and **ATARI ST £19.95**

SPECTRUM
COMMODORE
£9.95
AMSTRAD

ocean

CRASH

ZX SPECTRUM

HYPERMARKET



CRASH COMPUTER COVERS

PROUD . . . of your untouched, virgin-new keyboard? Don't let it bite the dust, protect it from coffee, biscuit nibbles, screen fall-out or just simple plain home-variety dust.

ASHAMED . . . of your grotty, coffee-stained, dust-cloaked keyboard? Cover the mess up and protect your Habitat environment with a CRASH keyboard cover.

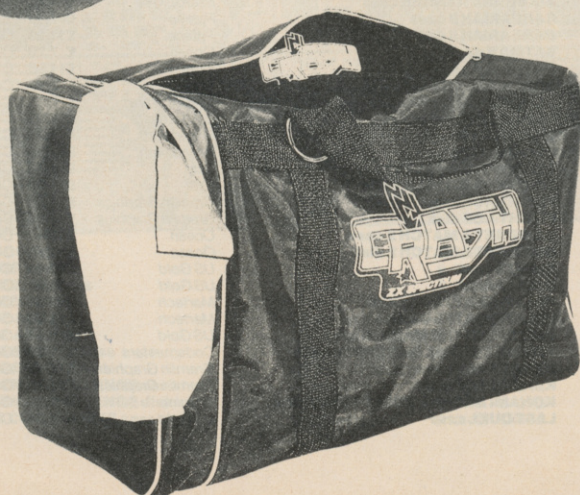
RUBBER-KEYED SPECTRUM COVER
OFFER 3.00, C001H
SPECTRUM+ COVER
OFFER 3.25, C002H
SPECTRUM 128 COVER
OFFER 3.75, C003H
SPECTRUM+2 COVER
OFFER 4.00, C004H



CRASH CAP

Join the CRASH troops with this authoritative blue base ball cap with white embossed CRASH logo. However much grey matter resides between your ears, the adjustable strap will ensure perfect fit.

CRASH CAP
OFFER 3.50, C010H



EUROMAX WIZCARD
OFFER 3.95, C242H

DYNAMICS COMPETITION PRO 5000 (normal)
Features arcade quality microswitches, dual fire buttons, robust steel shaft and rubber return for smooth control and longer life.
DYNAMICS COMPETITION PRO 5000 (normal)
OFFER 13.50, C243H

DYNAMICS COMPETITION PRO EXTRA
Features rapid fire, unique slow motion and see-through body.
OFFER 15.00, T500H

DYNAMICS COMPETITION PRO 5000 (clear)
The designer joystick with see-through body.
DYNAMICS COMPETITION PRO 5000 (clear)
OFFER 14.00, C244H



CRASH SPORTS BAG

Have CRASH bag will travel in style. This top quality silver blue sports bag will feel right whether your jet setting round the world or simply walking to the local sports centre. Comes with enormous cavity and a useful end pocket.

CRASH SPORTS BAG
OFFER 12.95, C115H

CRASH BINDER

Show some respect for all the brilliant effort the CRASH production team has put into your favourite mag by conserving the twelve masterpieces for posterity. The bound collection will be worth a fortune when it goes under the hammer at Sotheby's in the year . . .
CRASH BINDER
OFFER 4.50, C009H

COMCON PROGRAMMABLE JOYSTICK INTERFACE

The only fully programmable joystick interface on the market! Links any joystick movement to any key of your Spectrum 48K, PLUS, 128 or 128 PLUS 2. Just plug function wire into key matrix and you're ready to go! Also supports joysticks with two independent fire actions.
OFFER 12.95, C501H

COMCON TWIN same as above, but with two parallel output joystick connectors.
OFFER 13.95, C502H

KONIX NAVIGATOR

Brand new ergonomically designed handheld joystick with Fire button positioned directly beneath the trigger finger for super-fast reactions. Unbreakable solid steel shaft.
KONIX NAVIGATOR
OFFER 14.99, C235H

KONIX MEGABLASTER

Precision moulded control knob with steel shaft for complete reliability. Dual fire buttons for left or right hand use. Heavy duty leaf switches provide directional control with long lasting operation. Includes suckers for table top fixing.
KONIX MEGABLASTER
OFFER 6.99, C236H

KONIX SPEEDKING

The joystick that actually fits your hand, with a fire button angled for your trigger finger to ensure accurate high-speed action. Solid steel breakproof shaft with neat clicking sound.
KONIX SPEEDKING
OFFER 10.99, C246H

EUROMAX ELITE STANDARD

Short travel micro switch action in ergonomic and highly durable designed body.

EUROMAX ELITE STANDARD
OFFER 9.95, C237H

EUROMAX PROFESSIONAL STANDARD

High durability, rapid response and ultra sensitive movement accuracy from this advanced ergonomic design.

EUROMAX PROFESSIONAL STANDARD
OFFER 15.95, C239H

EUROMAX PROFESSIONAL GRIP

OFFER 13.95, C240H

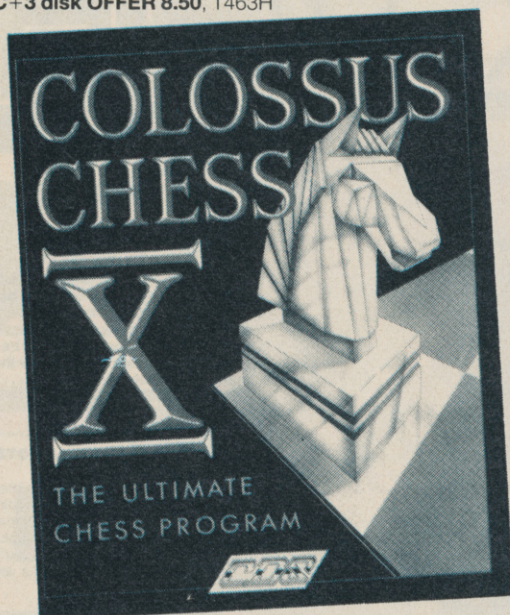
EUROMAX PROFESSIONAL AUTO-FIRE

OFFER 18.95, C241H

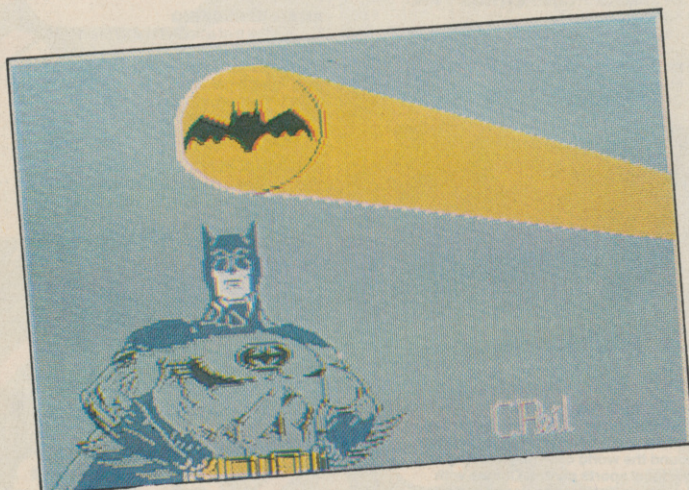
THOUGHT PROVOKING CDS COLOSSUS CHESS X OFFER!

Check mate! Strategic discussions with CDS software has led to this superb reader deal you can't possibly refuse. Colossus is now available in cassette and disk form:

SPEC48/128/+2 cass OFFER 6.50, T458H
SPEC+3 disk OFFER 8.50, T463H



HIGHLY RECOMMENDED SOFTWARE



POWERPLAY CRUISER RED/WHITE/BLUE

This excellent joystick features microswitch directional control and fire action. A unique variable tension control allows the user to adjust the return force to extra sensitive, normal and firm.

OFFER 9.99, T245H

POWERPLAY CRUISER STREAM-LINE ALL BLACK

With dual lead for Spectrum 48K/128K/Plus and Plus 2 & 3.

OFFER 12.99, T450H

POWERPLAY CRUISER CLEAR AUTO FIRE

Simply by holding down either of the fire buttons engages Auto Fire.

OFFER 12.99, T451H

POWERPLAY CRYSTAL STANDARD

Designed by Peter Lawton Harris of Zip Stik and Super Professional fame. Clear with red fire buttons and pistol grip handle.

OFFER 14.99, T452H

POWERPLAY TURBO CRYSTAL

Provides fast Auto Fire action.

OFFER 16.99, T453H

SPECTRUM+CASSETTE LEADS

Link your Spectrum+3 to your cassette recorder and gain access to your large collection of Spectrum 48K tape software.

SPECTRUM+3 CASSETTE LEADS
OFFER 3.95, C247H

QUICKSHOT 2+2 JOYSTICK

Modified Quicksot 2 makes use of the second fire action on the COMCON interface by splitting the two joystick trigger switches for independent operation.

OFFER 9.95, C504H

+2 ADAPTOR

Links up any Atari-compatible joystick to your SPECTRUM+2 and SPECTRUM+3 joystick output ports.

OFFER 2.50, C505H

DIGIT

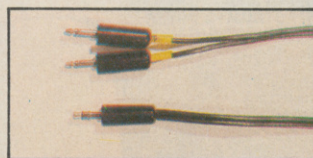
The low-cost alternative to add-on keyboards. Improves the action and feel of the standard Spectrum Plus keyboard by replacing the rubber membrane with individual coil springs and plungers. Provides ultra-light key stroke.

OFFER 7.00, C503H

CURRAH MICRO SPEECH

Speech and Spectrum sound from your TV. Compatible with rubber keyed Spectrum and Spectrum+ versions.

CURRAH MICRO SPEECH
OFFER 14.95, C300H



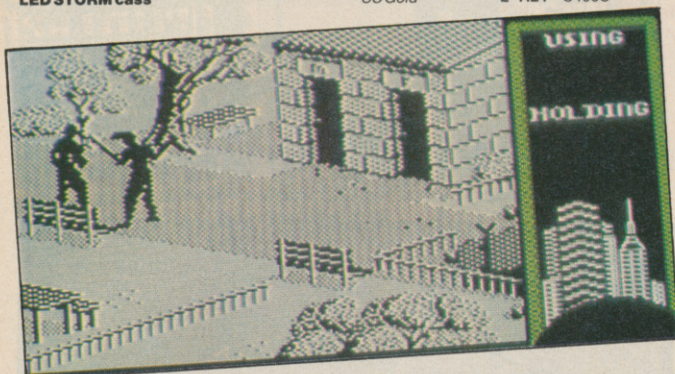
TITLE

10 COMPUTER HITS VOL 5 cass
10 COMPUTER HITS VOL 5 disk
4 SOCCER SIMULATORS cass
AFTERBURNER cass
AIRBORNE RANGER cass
BARBARIAN II cass
BARBARIAN II disk
BATMAN cass
BATMAN disk
BLACK BEARD cass
CLOCKCHESS cass
CLOCKCHESS disk
ESPIONAGE cass
ESPIONAGE disk
FISTS'N'THROTTLERS cass
FISTS'N'THROTTLERS disk
FLIGHT ACE cass
FLIGHT ACE disk
GAME SET & MATCH 2 cass
GAME SET & MATCH 2 disk
GIANTS cass
GIANTS disk
HELLFIRE ATTACK cass
HELLFIRE ATTACK disk
HISTORY IN THE MAKING cass
INTERNATIONAL RUGBY SIM cass
KARATE ACE cass
KARATE ACE disk
KONAMI ARCADE COLLECTION cass
LAST DUEL cass

LABEL

Beau Jolly £10.40 C422C
Beau Jolly £13.45 C422D
Codemasters £ 7.24 C307C
Activision £10.44 C263C
Microprose £ 7.95 C302C
Palace £ 7.99 C304C
Palace £11.99 C304D
Ocean £ 7.20 C306C
Ocean £11.95 C306D
Kixx £ 2.99 C409C
CP Software £ 7.95 C402C
CP Software £11.95 C402D
Grandslam £ 7.20 C301C
Grandslam £11.95 C301D
Elite £10.44 C416C
Elite £11.99 C416D
Gremlin Graphics £11.99 C413C
Gremlin Graphics £14.49 C413D
Ocean £10.40 C417C
Ocean £14.45 C417D
US Gold £10.44 C415C
US Gold £15.99 C415D
Martech £ 7.24 C403C
Martech £11.99 C403D
US Gold £19.99 C418C
Codemasters £ 1.99 C400C
Gremlin Graphics £10.44 C414C
Gremlin Graphics £11.99 C414D
Imagine £ 7.95 C410C
US Gold £ 7.24 C408C

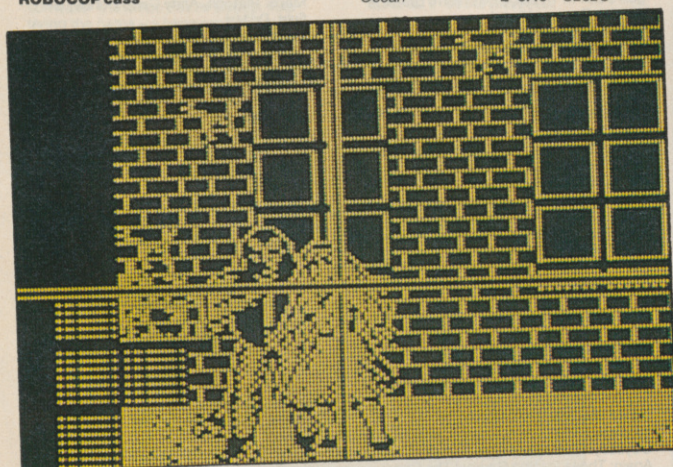
TITLE	LABEL	OFFER CODE
LAST DUEL disk	US Gold	£10.44 C408D
LAST NINJA 2 cass	System 3	£10.44 C254C
LAST NINJA 2 disk	System 3	£11.99 C254D
LED STORM cass	US Gold	£ 7.24 C406C



LED STORM disk	US Gold	£10.44	C406D
LIVE AND LET LIVE cass	Domark/Elite	£ 7.24	C258C
LIVE AND LET LIVE disk	Domark/Elite	£11.99	C258D
MINI-PUTT cass	Electronic Arts	£ 7.20	C259C
MINI-PUTT disk	Electronic Arts	£11.95	C259D
NETHERWORLD cass	Hewson	£ 6.40	C305C
NETHERWORLD disk	Hewson	£10.40	C305D
OPERATION WOLF cass	Ocean	£ 6.40	C256C
OPERATION WOLF disk	Ocean	£11.95	C256D
PACMANIA disk	Grand Slam	£ 7.20	C253C
POWERPLAY cass	Players	£ 1.99	C300C
PRO SKATEBOARD SIM cass	Codemasters	£ 1.99	C401C
R-TYPE cass	Electric Dreams	£ 7.99	C251C
RETURN OF THE JEDI cass	Domark	£ 7.95	C404C

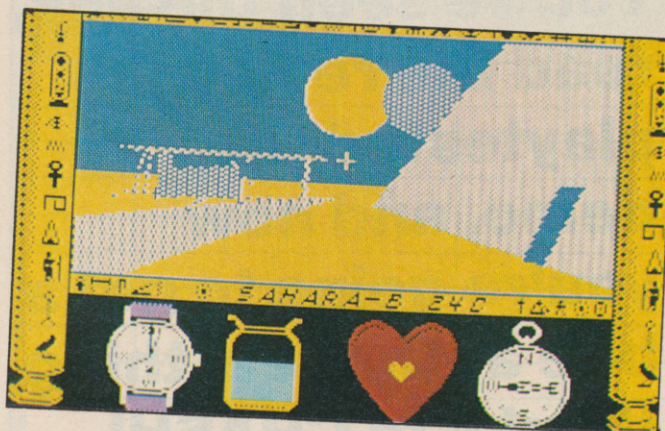


RETURN OF THE JEDI disk	Domark	£11.95	C404D
REX cass	Martech	£ 7.24	C257C
REX disk	Martech	£11.99	C257D
ROBOCOP cass	Ocean	£ 6.40	C262C



ROBOCOP disk	Ocean	£11.95	C262D
SAVAGE cass	Firebird	£ 7.24	C250C
SKATEBALL cass	Ubisoft	£ 7.24	C405C
SKATEBALL disk	Ubisoft	£11.99	C405D
SPACE ACE cass	Gremlin Graphics	£11.99	C412C
SPACE ACE disk	Gremlin Graphics	£14.49	C412D
SUPERSPORTS cass	Gremlin Graphics	£ 6.44	C260C
SUPERSPORTS disk	Gremlin Graphics	£10.44	C260D
SUPREME CHALLENGE cass	Beau Jolly	£10.40	C421C
SUPREME CHALLENGE disk	Beau Jolly	£13.45	C421D
TAITO COIN-OP HITS cass	Imagine	£10.40	C419C

TITLE	LABEL	OFFER CODE
TAITO COIN-OP HITS disk	Imagine	£14.45 C419D
TEN MEGA GAMES cass	Gremlin Graphics	£10.44 C411C
TEN MEGA GAMES disk	Gremlin Graphics	£11.99 C411D
THE IN CROWD cass	Ocean	£10.40 C420C
THE IN CROWD disk	Ocean	£14.45 C420D
THE MUNSTERS cass	Again Again	£ 7.99 C407C
THUNDER BLADE cass	US Gold	£ 7.24 C255C
THUNDER BLADE disk	US Gold	£10.44 C255D
TOTAL ECLIPSE cass	Incentive	£ 7.95 C307C



TOTAL ECLIPSE disk	Incentive	£11.95	C307D
TRIVIAL PURSUIT/A NEW BEGINNING cass	Domark	£11.95	C303C
TRIVIAL PURSUIT/A NEW BEGINNING disk	Domark	£15.95	C303D
TYPHOON cass	Imagine	£ 6.40	C261C
TYPHOON disk	Imagine	£11.95	C261D

THE MEGA CHOICE:

APART FROM OUR HIGHLY RECOMMENDED GAMES LIST, YOU CAN ORDER ANY GAME RELEASED BY THE MAJOR SOFTWARE HOUSES TO DATE ON CASSETTE, CARTRIDGE OR DISK.

OUR OFFER PRICES ARE VALID FOR ANY FULL-PRICED GAMES AND INCLUDE FIRST CLASS POSTAGE AND PACKING - NO OTHER EXTRA CHARGES. LOOK UP THE PRICE OF EACH GAME IN THE OFFER TABLE, ENTER THE OFFER PRICES ON THE ORDER COUPON, THEN ADD THEM UP. ORDERS FOR TITLES WHICH ARE NO LONGER IN DISTRIBUTION WILL BE RETURNED. YOU WILL BE REGULARLY NOTIFIED OF ANY DELAYS CAUSED BY LATE RELEASES.

SOFTWARE OFFER PRICE TABLE

4.99	3.99	1.00
5.95	4.74	1.20
7.95	6.40	1.55
7.99	6.44	1.55
8.95	7.20	1.75
8.99	7.24	1.75
9.95	7.95	2.00
9.99	7.99	2.00
11.99	9.99	2.00
12.95	10.40	2.55
12.99	10.44	2.55
14.95	11.95	3.00
14.99	11.99	3.00
19.95	15.95	4.00
19.99	15.99	4.00
23.00	18.40	4.60
24.95	19.95	5.00
28.95	23.15	5.80
29.95	23.95	6.00
34.95	27.95	7.00

HOW TO ORDER:

WRITE REQUIRED GAME(S) ON ORDER LIST, INCLUDING MEDIA TYPE, COMPUTER AND ORDER CODE (WHERE LISTED).

IF OFFER PRICE NOT INDICATED, CHECK IN AD OR REVIEW FOR CORRECT RECOMMENDED RETAIL PRICE (RRP).

LOOK UP SPECIAL OFFER PRICE AND WRITE ON ORDER FORM.

ADD UP TOTAL AND ENCLOSE CHEQUE OR POSTAL ORDER OR ALTERNATIVELY USE ACCESS/VISA FACILITY (DON'T FORGET TO INDICATE EXPIRY DATE!).

REMEMBER: GAMES ORDERS REQUIRE ORDER CODE OR MEDIA TYPE AND COMPUTER, GARMENT ORDERS ORDER CODE OR GARMENT SIZE, HARDWARE ORDERS ORDER CODE. INCOMPLETE ORDER FORMS WILL BE RETURNED.

PLEASE RING (0584) 5620 IF IN DOUBT!

PRICES VALID FOR UK/EIRE/ EUROPE ONLY. FOR OVERSEAS ORDERS PLEASE ADD £2.00 PER ITEM FOR AIR MAIL DELIVERY

DELIVERY:

NOT ALL LISTED PRODUCTS WILL HAVE BEEN RELEASED AT PRESS TIME.

GOODS WILL BE DESPATCHED AS SOON AS POSSIBLE. CUSTOMERS WILL BE INFORMED OF ANY LONG DELAYS.

BUDGET RANGE

ORDER FOUR GAMES IN THE £1.99 RANGE AND PAY FOR THREE (£5.97 PAYMENT TOTAL) - A SAVING OF £1.99!

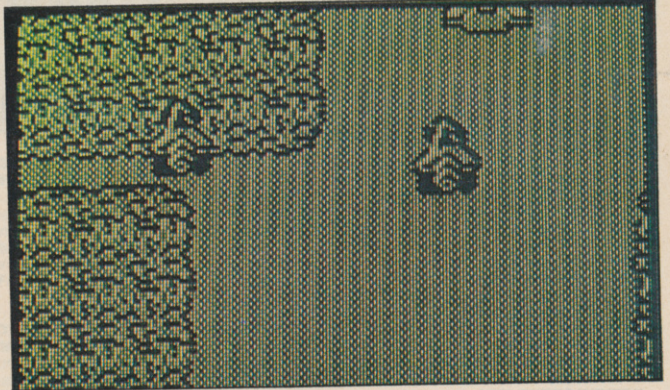
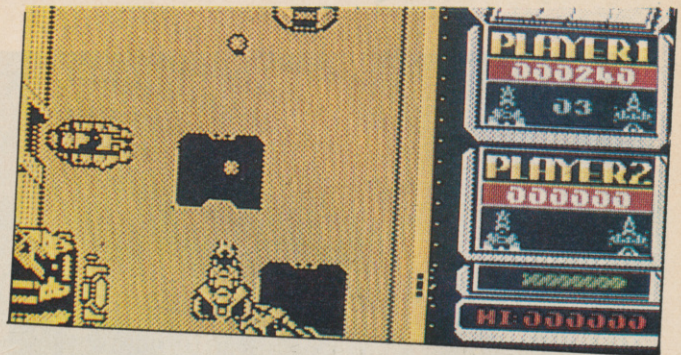
ORDER FOUR GAMES IN THE £2.99 RANGE AND PAY FOR THREE (£8.97 PAYMENT TOTAL) - A SAVING OF £2.99!

JUST FILL IN THE NAME AND PUBLISHER OF THE FOUR GAMES REQUIRED AND THE PAYMENT TOTAL OF £5.97/£8.97 (DON'T USE THE OFFER PRICE TABLE)

SUBS OFFER

**You've seen the ads,
read the review,
playtested the
demo, and now
you're going to get a
bite at the real thing
thanks to CRASH!**

Yes, we've brought you the review and the demo of US Gold's LED STORM, now we're going further still and are offering you a free copy of the game. All you have to do is subscribe to twelve future issues of CRASH and we'll send you the cassette for free as a welcoming gift to the exclusive subscription club. In case you've already got LED STORM you may choose US Gold's LAST DUEL



instead. And just to show we don't forget our existing subscribers, we can make available any of the two games at a ridiculously discounted price of £5.99! And if you keep reading CRASH carefully – as you no doubt do – you'll be getting lots of playing tips to help you along. What more could you want! (Wishes on a postcard to Lloyd Mangram – that'll keep him busy . . .)

BACK NUMBERS

No 4 May 1984

The Quill analysed! The fabled ZX Micro-drive appears! Run It Again: Pengo games! Graphics utilities! Living Guide: boardgames, simulations, strategy, adventure!

No 17 June 1985

Denton Designs! Sinclair Story 3! Maps: Knight Lore, Underwulde! Leonardo graphics! Datel sound sampler! Artist: David Thorpe!

No 18 July 1985

Gremlin Graphics profile! Artist: Bob Wakelin! Map: Gyron Atrium!

No 19 August 1985

CRL profile! Oliposter! Round-up of Basic compilers! Artist: Rich Shenfield! Maps: Dynamite Dan, Shadowfire!

No 20 September 1985

Electronic Pencil Company profile! Maps: Alien 8, Dun Darach!

No 21 October 1985

Holografix profile! Holograms! Map: Nodes Of Yesod! Platinum Productions profile!

No 22 November 1985

Fanzine File! Microdrive tips! Artist: Susan Rowe! Fantasy gamesbooks!

No 23 December 1985

Melbourne House! Computer graphics! Artist: Dave Beeson!

No 24 Xmas 1985/86

Artist: Oliver Frey! Gargoyle Games profile! Lloyd's Lookback! Hewson profile!

No 25 February 1986

Durell profile! Microsphere! FORTH and extensions to ZX BASIC!

No 26 March 1986

St Bride's profile! Spectrum 128! Micro-net 800! Multiface 1!

No 27 April 1986

Playing Tips supplement! Mel Croucher! Imagine profile! PBM convention!

No 28 May 1986

Fanzines! Martech profile! Composite Video Interface! SpecDrum!

No 29 June 1986

First PBM Mailbox! Homegrown software! Realtime profile! Maps: Cylu, Sir Fred, Saboteur, Tantalus!

No 30 July 1986

Birth Of A Game! Laser Genius! Maps: Tantalus, Movie!

No 31 August 1986

Software Projects! Word Processing! Maps: Pentagram, Heavy On The Magic!

No 32 September 1986

Programmer: Dave Perry! GAC! Maps: Core, Ghosts 'n' Goblins, Bobby Bearing! Echo Synthesizer!

No 33 October 1986

Programmers: Jon Ritman, Costa Panay! Maps: Dan Dare, Cauldron III! SpecDrumming!

No 34 November 1986

Programmer: Don Priestley! Genesis Update! Maps: Dynamite Dan II, Equinox, Universal Hero! Music Machine!

No 35 December 1986

Designer: Dan Malone! Computer Advertising! Maps: Glider Rider, Thrust, Lightforce! MIDI!

No 36 Xmas 1986/87

Lloyd's Lookback! Spectrum Music! Maps: Scooby Doo, Heartland, Droid!

No 37 February 1987

John Richardson: Jetman! CRASH Reviewers revealed! Match Day Challenge! Maps: Fairlight II, Firelord, Avenger, Dandy!

No 38 March 1987

Fanzines! Designer: Bernie Drummond! Maps: Cobra, Impossaball, Uridium! MIDI!

No 39 April 1987

Arcades Update! The Z88! Programmer: Steve Taylor! Maps: Nosferatu, Double Take, Future Knight, Feud!

No 40 May 1987

Playing Tips supplement! Maps: Short Circuit, Antirad, Conquest, Into The Eagle's Nest, Sceptre Of Bagdad, Dragon's Lair II, Thrust II, Fat Worm Blows A Sparky, Tarzan, Aliens!

No 41 June 1987

Programmer: Mike Singleton! Industry Today! Adventure Trail supplement! Maps: Saboteur II, Head Over Heels! Multitrackers! 128 Bugs!

No 43 August 1987

The +3 arrives! Run It Again runs the Gauntlet clones! CRL's 3D Gamemaker! Maps: Enduro Racer, Flash Gordon!

No 44 September 1987

Programmer: David Aubrey-Jones on Mercenary! The Sega Master System! Tech Tips: that Swift Disc! Maps: Vampire, The Curse Of Sherwood!

No 45 October 1987

Run It Again: the kick-'em-ups! The CRASH History Part One! The Budget Boooooom! Maps: Game Over, Wonder Boy!

No 46 November 1987

16-page 3D section and glasses! Graphics and Sound Specialists! Maps: Exolon, Panzadrome, Mutants!

No 47 December 1987

16-page Judge Death pull-out! 2000AD's Odyssey! Every Tie-In Ever Made! Run It Again: Those Racing Games! The Christmas List! Maps: Indiana Jones, Dizzy!

No 48 Xmas 1987/88 (January 1988)

Pull-out poster! The CRASH Directory! Going To Bed With CRASH! A second helping of 3D! Maps: Yogi Bear, Mercenary, Tai-Pan!

No 49 February 1988

Level 9 profile! Last Part of CRASH History! Flying Tonight – British Airways' flight simulators! Maps: Wizball, Thundercats, Athena!

No 50 March 1988

16-page Tech Niche supplement focusing on hardware and utilities! Write Your Own Adventures – GAC versus PAW! Maps: Platoon, Andy Capp Handy, Garfield, Driller!

No 51 April 1988

The Best Of British – Ultimate! Strategy Special! Run It Again – the world of 3D games! Maps: Dark Sceptre, Platoon (levels 2 & 3)! More MIDI!

No 52 May 1988

All the Arcade action! Compilation news! Nick Roberts' Playing Tips Special! CRASH Comms – Enter the foyer of Hotel California!

No 53 June 1988

16-page Coin-ops supplement! Microprose revealed! Cecco's log! Maps: Inside Outing, Knightmare! CP/M Emanicipation!

No 54 July 1988

Cassette cover mount featuring Dark Side and Last Ninja 2 previews! Mel Croucher on computer games addiction! The Spectre Comms pack reviewed!

No 55 August 1988

Split Screen and Censorship! Atari ST versus Amiga! Adventure Trail Extra!

No 56 September 1988

School work from home! Computers commit murder! PC Showcase – Guide to the Personal Computer Show!

No 57 October 1988

The definitive Crash guide to the All Time Greats supplement! Coin-op arcade action! Commercial breaks – Computers in TV production studios!

No 58 November 1988

Free Sneak Preview Tape featuring Robocop and Total Eclipse! Hackers Show Off! The biggest PC Show ever! Massive R-Type poster!

No 59 December 1988

Another Sneak Preview Tape featuring

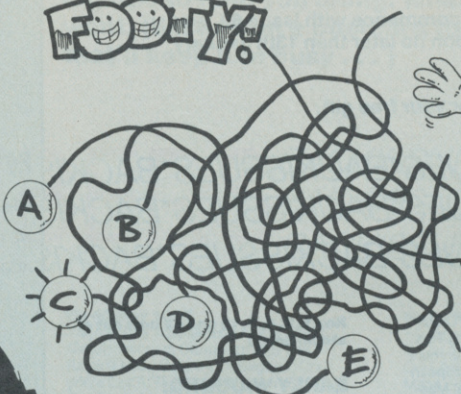
Just two issues ago we published brain cell-packed 16 pages of puzzles. We promised the solutions last issue, but due to the Christmas rush, Phil King losing the answers and the Production Manager chopping a few pages off the allocation, we've had to hold them over to this issue. So without further ado, here's the full exposé...

THE SIMPLE SOLUTIONS

URSINE
REINS
SIRE
IRE
RICE
CRIME
METRIC

DROP 'EM
(AND THEN PICK
THEM UP AGAIN!)

PHILZ
FOOTY!



PUZZLED?

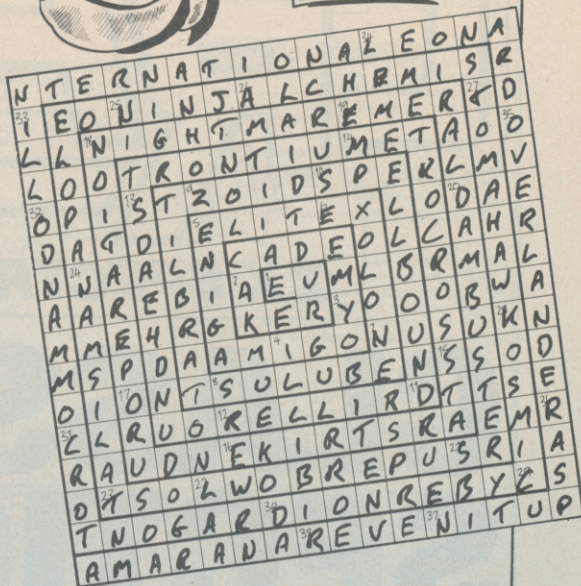
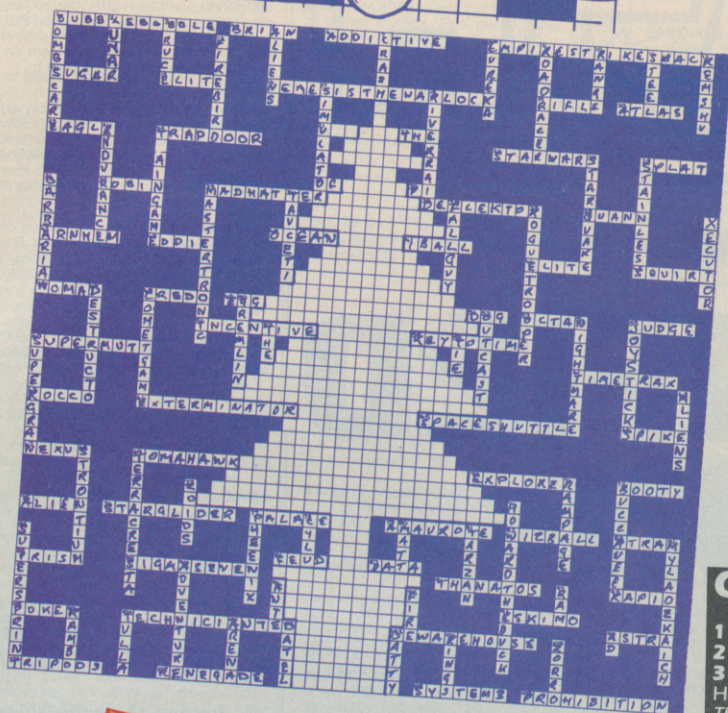
THE
CRASH
ZX SPECTRUM
CHRISTMAS
WORDSEARCH

J R O T I D E R M S L F I L I U R K M O I U T G M
C H I E E J L H F M E H N D S D Q X J E T M A N
R I T N A M E O F G A S A L A I A M H B L T U H
X L S P K E R I D A L A W O L D U L R P E O S
A V T H N K E G L I Y X R H E S T N E S E R P O A
I A N K A C R F E D Y L C T N E R S E R E A C P U
I O A I O O U R I N G R D E S A K H E L G O E K A
T A R M U W A R T N W S T R E M T E R R T B T
N T A G I M E U A E R E O S C D E A S O H A O Y U
A S H S I M A M T A B L A I V T E I X C E D Y E S
A E K I N S W K N O T T R C Y S F O E R S L E
R K I G I O S A V M A S S X A T R H E A M V A R H
G E R H U R E X F N C E E I P E S R O T A J R L
E R N S A N R B E J C H I O P T L E N E L I G E M
I E W O O W N E T K I M F A A L M G Z A L B E G N
V X R E D R H C A E N E U P S R A A T H E H O E O
O N J O O S I C S U G R R T R A W I E H P T S U G
M A R I A N O I L O A Z A W E S M K A T L O N R U
O F S E V E R L M R C E A N W T A X Y W A R I K B
L F T O N P Y E N O U O I D E R T E R A C T A Y I
A I E A R T I S T E P R G S I K V Y A E S A M D L
S T N E L L K L A W V C N I V P A Z Z E H R B O O
R A T D S E R R N U E I B L E S U L N L E T O E W
X N L O R E B O T C O A M U T C E P C A N A R J
E I C A T E R A E F A D E C L L I V A N S L L E J

	COMPUTER					AGE						FAVE GAME			
	SPECTRUM	COMMODORE 64	AMSTRAD	ATARI	AMIGA	12	13	14	15	16		ARCADE ADVENTURE	ADVENTURE	SHOOT-EM-UP	SPORTS SIMULATION
ADAM	X	X	X	X	X	X	X	X	X	X		X	X	X	X
BRENDA	X	X	X	X	X	X	X	X	X	X		X	X	X	X
COLIN	X	X	X	X	X	X	X	X	X	X		X	X	X	X
DAVID	X	X	X	X	X	X	X	X	X	X		X	X	X	X
LIZ	X	X	X	X	X	X	X	X	X	X		X	X	X	X
ARCADE ADVENTURE	X	X	X	X	X	X	X	X	X	X		X	X	X	X
ADVENTURE	X	X	X	X	X	X	X	X	X	X		X	X	X	X
SHOOT-EM-UP	X	X	X	X	X	X	X	X	X	X		X	X	X	X
SPORTS SIMULATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X
STRATEGY	X	X	X	X	X	X	X	X	X	X		X	X	X	X
12	X	X	X	X	X	X	X	X	X	X		X	X	X	X
13	X	X	X	X	X	X	X	X	X	X		X	X	X	X
14	X	X	X	X	X	X	X	X	X	X		X	X	X	X
15	X	X	X	X	X	X	X	X	X	X		X	X	X	X
16	X	X	X	X	X	X	X	X	X	X		X	X	X	X

WHAT
ARE
THEY
LIKE?

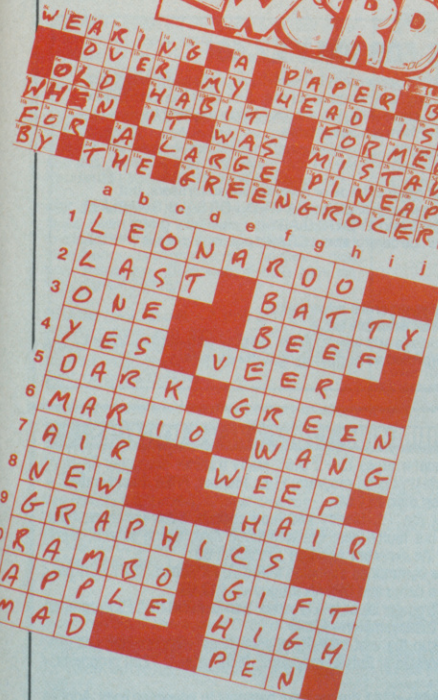
MAMMOTH CROSSWORD



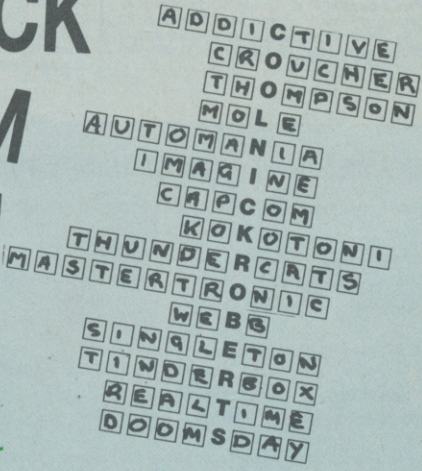
CRAZY CRASH ANSWERS

- 45 seconds (we've seen it done!)
- Approximately 4½ days (in a good week!)
- Because the aerial was broken! (Groan, that joke's even older than Lloyd's Hermes typewriter – no doubt Jimmy Tarbuck will be using it on *Live From The Palladium* [the joke not the typewriter!])
14400. (We're told he even says it in his sleep!)
- None – Mark hasn't made any records! (Oh alright, James Brown's contain two – one per side.)
- 20 seconds (fat chance!).
- So big that it won't fit through the letter box!
- About 29 hours! (Lloyd was hoping for a brand new word processor for Christmas – I wonder if he'll be happy enough with the deluxe paper bag the Art Department have made him?)
- We don't know because he broke the weighing scales!
- d) all three. (I'm not too sure about the first two but the third is definitely correct!)

DOUBLE CROSSWORD



STACK 'EM HIGH!



WHACKY WORDS

- | | |
|-----------------------------|------------------------|
| 1 sodden (sudden) | 11 moss (mess) |
| 2 ceased (seized) | 12 axed (asked) |
| 3 mattered (muttered) | 13 bog (bag) |
| 4 rowed (rode) | 14 soaked (soaked) |
| 5 flours (flowers) | 15 nether (never) |
| 6 embellished (embarrassed) | 16 battle (bottle) |
| 7 (acia) (face) | 17 slept (slipped) |
| 8 beetle (beetroot) | 18 spelt (spilt) |
| 9 worked (walked) | 19 elapsed (collapsed) |
| 10 grin (green) | 20 eight (nine) |



CLASSIFIED SECTION

For Sale Spectrum 128K +2, two joysticks, Ram Turbo, Crash magazines/binders and £150 of games all for £150. Phone 0733 252614 after 6.30pm.

Spectrum 128K, joystick interface, tape player and £240 worth of games, ready to use. All in working order. Phone Weymouth 776046. All for £150 or nearest offer.

Lords of Midnight Editor. For all Spectrums. Lets you change landscapes, armies and characters. Set up playing conditions. £2.50 (tape), £4.50 (disk). Send SAE and cheque or P.O. to: PDT, Roamwood, Debenham, Stowmarket, Suffolk IP14 6NR.

Loadsa games for sale new and old from 50p. For list ring 0705 861202 or send SAE to 92 Waverly Road, Southsea, Hants PO5 2PS.

Electron and games £60, also Spectrum software, many titles such as Tai-Pan, Match Day II, Gryzor, Nineteen, D.T.O.C. £3 each. Currah Speech £10, Timex Printer £20, Comcom programmable joystick interface £10. Phone Mark on 01 450 9589.

CBS Colecovision with Atari adaptor, CBS and Atari games £100, will swap for Sega Master System with games. Also Turbo Module for CBS Colecovision £35. Ring Richard on 01 531 7254 after 6pm.

Spectrum 48K, data recorder, both boxed, Kempston interface, joystick, 35 original games £130 on. CRASH mags issues 25 onwards, consider any offers. Phone Roddy on 031 449 4918 after 6pm.

Spectrum 128K with +D disk/printer interface, disk drive, data recorder, 10 blank discs, £200 worth of games, joystick interface and 2 joysticks for only £200 on. All in good condition. Phone Tanveer on (01) 541 5139.

FOR SALE: Opus Discovery 1, manual and 6 disks, 180K storage capacity, £80. Excellent condition. Send SAE to Mr. M. Brooks, 24 Woodstock Drive, Wordsley, Stourbridge, West Midlands DY8 5HY or phone 0384 274017 after 6.00pm.

Spectrum with accessories and over £900 of software, £200 or exchange for CBM64 with tape recorder and software. Contact Walsall (0922) 642791 after 3pm and ask for Tim. All software titles are originals.

Spectrum games for sale, old and new titles from £1.00 to £5.00 including World Class Leaderboard, Tracksuit Manager, Nick Faldo Plays the Open. SAE to Paul Robins, 4 Enys Road, Truro, Cornwall TR1 3TE.

Spectrum 128K +3 computer with disk drive, 2 joysticks, disks, tape recorder and leads. Multiface 3, and over 55 original games. All boxed, worth over £800. Will sell for £350. Phone Stafford (0785) 664473.

Spectrum 48K, Lo Profile keyboard, Interface 2, Quickshot 1 joystick, data recorder, Currah Speech, 85 originals inc. Driller, Darkside etc. and lots of copies free. Will take £145. Phone Paul on 031 336 5984. Must be able to collect.

48K Spectrum, Saga 1 Emperor keyboard, Opus disk drive, Multiface, tape recorder, joystick, (Quickshot II), programmable interface, hundreds of games, 80+ on disk + disk box, mags etc. £220 on. Phone Nick on Wokingham 792355.

CRASH back issues - 3 to 6 and 8 to 59 in plastic covers and binders. Price open to offers. Ring 0295 78219 or write to: Graham Stewart, High Rock, Sibford Ferris, Nr. Banbury, Oxon OX15 5QW.

Games! I have over £400 worth of the latest Spectrum games including 720, '19', Dark Side, etc. Sell the lot for £130 on. Bulk buyers only please. Phone John on Birmingham 4307977. Hurry!!!

Spectrum +2, boxed, 2 joysticks with connector, games worth £250+, many recent inc. Vindicator, R-Type, Bubble Bobble, Last Ninja II. Over 50 mags with pokes, demos. £100 vgc. Phone Ormskirik, Lancs. (0695) 75828 after 4pm.

Atari 130XE, XF551 disk drive, 1010 data recorder, ten blank disks, over £150 of software, joystick, magazines, XL handbook. Value: £480, sell £325. Write: Rob, Publishing House, 50 Wrotham Road, Gravesend, Kent DA11 0QF.

50 'CRASH' mags, also 'YOUR SPECTRUM' and 'YOUR SINCLAIR' 1-57, 'INPUT' 1-52, ZX Computing, AMX mouse, 40 books, games, utilities. Offers to J. Taylor, 32 Ashford Road, Boscombe, East Bourne, Dorset BH6 5QD. SAE. Tel: (0202) 484921.

ZX Spectrum 128 with 48K Spectrum, plus computer table, printer, Interface 1, Microdrive + cartridges, 70+ games, blank tapes, Multiface 128, two joysticks, Ram Turbo, mags, loads of stuff. Please, please ring (0279) 34252 for more details.

Spectrum +2, only 3 months old, with over £100 worth of software, Cheetah joystick and some magazines. All for only £125. Telephone 0484 531457 after 6 o'clock and ask for SAR-FRAZ now!

Spectrum 128K, also Spectrum 48K, joystick interface, joystick, light pen, Slomo, printer interface plus books and over £300 worth of software, also CRASH issues 2 to 60. Phone John on 0691 654948 evenings.

Spectrum 128K +3, boxed, over £350 of original games, 13 blank disks and tape deck. The lot is worth £580+, will sell for £230 on. Also Spec-Drum for £10. Will split. Tel: Niel (0970) 820186 evenings.

CRASH No's 1 to 40. No's 1 to 12 in binder. Offers to Mick on (0438) 724172 after 7.00pm or weekends.

SWAPLINE

Swap my Football Manager 2, Xecutor, Vindicator, Daley Thompson, 88 etc., for Typoon, Airborne Ranger, Bards Tale, Taito Coin-Op Hits. Phone: 061 748 2590 or write to Lee Stanhope, 115 Railway Road, Urmston, Manchester M31 1YD.

Will swap Currah Speech unit (48K) for Spectrum or Sega software and Sega Transbot, Gangster Town for other Sega games. Especially want Spectrum Gauntlet II, Star Wars, Sega Spy vs. Spy, Zillion. Contact Brett on 0702 294513.

Swap my Spectrum +2 and joysticks, interfaces +100 games for Spectrum +3 and games. Write to Neil, 80 Kenilworth Drive, Kirk Hallam, Ilkeston, Derbyshire DE7 4EW.

Wanted any American Football games. Will swap: Scumball, Rugby, Grand National, Decathlon, Saboteur. Phone Sam on 0789 204772 after 5.00pm.

Wanted any of Bionic Commando, Street Fighter, Double Dragon, Buggy Boy, Splitting Image to swap for any of Empire Strikes Back, Ikari Warriors, Karnov, Flying Shark, Matchday, Barbarian and more. Phone Pip on (0865) 247989.

PEN PALS

Hi, I'd like to hear from you! I'd also like to swap the latest games, so get those games and lists rolling into the following address: Aaron Evans, 10 Wilson Close, Widnes, Cheshire WA8 0BH.

G'Day! I'm a 14 y.o. Aussie that owns a 128K Speccy (Yes they do have computers down under). If you're interested please be fair dinkum enough to write more than twice to: Adrian Price, 2 Plume Court, Glen Waverley, Victoria, Australia 3150.

USER GROUPS

+3 Games Club. Joining gives you access to over 1300 games and discount disks and other hardware. You must have a Multiface 3. For details: SAE to +3 Club, Penrhyncoch Post Office, Aberystwyth, Dyfed SY23 3EH.

Utilities, programming help, graphics, info, homegrown software for the more serious Spectrum user and much more! Monthly on Disciple/D, DPUS, Microdrive, cassette. £2 for first issue of Outlet! Ron Cavers, 605 Loughborough Road, Birstall, Leicester.

FANZINES

SPECTRE and RESTART. Now two great fanzines in one. For your copy of the latest issue send 40p and a SAE to: Jonathan Bell, 26 Chaffers Mead, Ashted, Surrey KT21 1NG.

T.A.G., the best 'zine around for Spectrum, C64, Amstrad, 48 professionally laid-out A4 pages, 31 reviews, tips, arcade, adventure, P.B.M., competitions + more besides! 50p + stamp: Beg to: Dan, 44 Thornton Road, Morecambe, Lancs. LA4 5PF.

The Screen Loader and Coder, loads and codes your own pictures as they do in original games. Send £1.50 chq/PO payable to: Steven Sandhu, 142 Brook Street, Erith, Kent. DA8 1JA.

The Machine Code Advanced is here. October sees the release of the M/C mag all for 50p. Send for free details if you like. If your ordering or asking: Mr. N. Lewis, 52 Kyle Cres, Whitchurch, Cardiff.

EPROM issue six now available. Spectrum fan magazine features exclusive interview with Code Masters and Mike Gerrard. Exclusive game reviews plus adventure and strategy. Collectors edition only £1.00. EPROM, 328 The Maltings, Penwortham, Preston PR1 9FD.

Screaming Potatoes!! Look at 'ECU' tape fanzine! It's only £1, yet has those brilliant articles and hundreds of pages! Remember: Buy 'ECU' - naturally!! Only £1. Ian Warren, 54 Clough End Road, Hattersley, Hyde, Cheshire SK14 3PX.

MISCELLANEOUS

Over 650 pokes, ACE value only £1.50 for 13 pages of pokes. Send a large SAE to Ben, 25 North Leas Avenue, Northstead, Scarborough, N Yorks. YO12 6LJ.

Professional PBM SOCCER LEAGUE. Fully computer moderated, includes League and Cup games, Internationals, transfers, multi-rated players ass. etc. Start up pack £4, subsequent turns £1.30 per fortnight. SAE to Grimsdale Games, 12 Aspen Way, Cringleford, Norwich.

Advanced fantasy wargaming new PBM. Chaos unleashed, race against time. Multi player game with control of 3 characters each. Send SAE for details to David Pullin, 3 Beacon Road, Standish, Wigan WN6 0SB.

FREE Membership to an amazing new Spectrum Club. Don't miss your chance to join this popular club. You will be surprised... Send large SAE to: S.H.C.(CR), 8 Brookside Close, Godley, Hyde, Cheshire SK14 2QQ.

FREE PBM! Yes, the first five people to send for details on Shipwreck get start-up pack plus two turns FREE! Cash prizes, cheap prices. SSAE to V.I.P., 19 Hayfell Avenue, Westgate, Morecambe, Lancs. LA4 4TS.

NEW computerised football PBM - division champions win £75. Join now for a realistic challenge. Turns every fortnight. For details send SAE to D.P. Clancy, Goodison, Promenade, Llanfairfechan, Gwynedd LL33 0BU.

BARDQUEST: Exciting new fantasy PBM. Turns only 70p. Prizes include free turns and CASH! Uses a computer program to process your moves. Send SAE to: Minotaur Games, 110 Tadmor Road, Romsey, Hampshire SO51 8HS. NOW!

Postal Soccer Management fortnightly magazine includes amazing cartoon strips as well as all the usual features + much more. Special discount. Send SAE to PSM, 31 Coleridge Ave, Penarth, S. Glamorgan CF6 1SQ. NOW!!

Spare Xmas money? Buy Knockout, the excellent boxing game, with twelve different opponents, two player option, joystick or keyboard, colourful graphics, realism, speech, strategy, simulation, cheatmodes! Only £2.00 to V. Vity, 2 Newlands Road, Morecambe, Lancs.

Good pay for good work. If you can write quality programs for any home computer or have already written quality programs contact Ryan Shaw, 39 Pond Close, Overton, Basingstoke, Hants RG25 3LZ. Includes PBM and adventure.

Football PBM league programme plus three cups. Features include nations and world cups, planning permission, ground capacity, shirt sponsorship, advertising, TV coverage, etc. Large SSAE for details. Treble 'S', 327 Chester Road, Sutton Coldfield B73 5BL.

TOP CLASS home written games required for publication by micro club. Please send your finished games with instructions for evaluation to: P. Downey, Fairbanks, School Lane, Great Leighs, Chelmsford, Essex OM3 1NG.

Join the Video Ball Quiz league played fortnightly at 50p per week. 10 questions a turn. Trophies for league winners plus videos of 90 minutes of live soccer matches.

Professional PBM Soccer League. Fully computer moderated. Features included league and cup games, transfers and Internationals. Entrance fee £4, subsequent turns £1.30 per fortnight. Write to Grimsdale Games, 12 Aspen Way, Cringleford, Norwich, Norfolk NR4 6UA.

90 SUPERGAMES

for the price of one

FOR SPECTRUM 48K + 128K + +2

HOURS OF FUN TO SUIT ALL TASTES

TAPE 1

1. TIME TRAX
2. THE BULGE
3. SHEEP PANIC
4. GLASS
5. RUPERT AND THE ICE CASTLE
6. SOULS OF DARKON
7. DEFCOM
8. DR FRANKY AND THE MONSTER
9. ROAD TOAD

TAPE 2

1. EVIL CROWN
2. WHISTARS
3. NICK FALDO'S OPEN
4. METEORSTORM
5. DEATH WAKE
6. ROBBIE
7. COMY
8. MICROMOUSE
9. INVADERS

TAPE 3

1. DARK EMPIRE
2. FANTASIA DIAMOND
3. HOCUS FOCUS
4. CORE
5. PETER SHILTON'S HANDBALL MARADONA
6. SPECTRON
7. CORRIDORS OF GENON
8. HYPERBLASTER
9. 3D TANX

90

GAMES FOR

£9.95

+ £1.50 p&p

TAPE 4

1. XENO
2. SMOOKER
3. ARENA
4. BLOOD 'N' GUTS
5. ROBO TO
6. QUETZALCOATL
7. SPACE COMMAND
8. LIFELINE
9. JAWZ

TAPE 5

1. MISSION OMEGA
2. SHAW JUMPING
3. TANTALUS
4. THE ISLAND
5. STAFFIRE
6. ATLAS ASSIGNMENT
7. NIFTY LIFT
8. STAR WARRIOR
9. KNOT IN 3D

TAPE 6

1. RED SCORPION
2. 3D SEIDOBAB ATTACK
3. CAPTAIN KELLY
4. ARCTURUS
5. PYRAMANIA
6. TWO GUN TURTLE
7. MISSILES DEFENCE
8. 1984
9. BILLY BONG

TAPE 7

1. SECTOR 80
2. HEATHROW
3. SODOV OF THE SORCERER
4. KADOM
5. REALM
6. MUMMY MUMMY
7. PANZER ATTACK
8. ZOOT
9. GRID PATROL

TAPE 8

1. NETHER EARTH
2. DOGSBOOY
3. FLYER FOX
4. OVERLORDS
5. THE LUDOS
6. TUTANKHAMUN
7. MOON BUGGY
8. S.O.S

TAPE 9

1. NIGHTFLUTE 2
2. LEGIONS OF DEATH
3. STROMTUM DOG
4. STAR TRADER
5. MUSHROOM MANIA
6. 3D TUNNEL
7. BOMBER BOB
8. THE CHESS PLAYER
9. ESCAPE

TAPE 10

1. FIRESTORM
2. REDCOATS
3. DRAUGHTS
4. CARPET CAPERS
5. PLANET FALL
6. GRID RUNNER
7. DRAGON BANE
8. TUBE CUBE
9. AGENT ORANGE

LOGIC

Mail or Telephone orders from:
19 THE BROADWAY, SOUTHGATE, LONDON N14.
TEL: 01-882 6833
 or direct from above address and:
6 MIDGATE, PETERBOROUGH, CAMBS.
155 HIGH STREET, WALTHAM CROSS, HERTS.

TRYBRIDGE SOFTWARE DISTRIBUTION

TITLE	SPECTRUM CASS DISC	TITLE	SPECTRUM CASS DISC	TITLE	SPECTRUM CASS DISC	TITLE	SPECTRUM CASS DISC	TITLE	SPECTRUM CASS DISC
ACE	2.95	ELCHELON	6.95	HELLFIRE ATTACK	6.95 10.45	OOPS	5.50	SPY V SPY ARCTIC	2.95
ACE OF ACES	2.95	ELITE 6 PACK 1.2 OR 3	6.95	HERO	1.00	OPERATION WOLF	5.75 9.95	STALINGRAD	7.45 9.95
ACTION SERVICES	5.95	E. HUGHES FOOTBALL	6.95 9.95	HERODES OF LANCE	7.45 10.95	OUTRUN	6.95	STAR RAIDERS 2	2.00
ADV ART STUDIO	14.95	EMPIRE STRIKES BACK	6.95	HIGH FRONTIER	2.00	OVERLANDER	5.50 9.95	STAR WARS	6.95
AFTERBURNER	7.45 10.45	ENIGMA FORCE	2.00	HIVE	2.00	OVERLORD	7.00	STEALTH FIGHTER	6.95 9.95
AIRBORNE RANGER 128	9.95	ESPIONAGE	5.95 9.95	HOTSHOT	6.00 8.95	PACLAND	6.25	STREET FIGHTER	6.95
ALIEN SYNDROME	6.45	EXPLODING FIST +	5.00	HYPABALL	1.50	PACMANIA	5.95	STREET SOCCER	6.95
ARCADE FORCE FOUR	7.95	4 x 4 OFF ROAD RACING	6.95	ICUPS	1.50	PAWN	9.95 10.95	STRIKE FORCE HARRIER	2.95
ARCHON COLLECTION	6.95 10.45	F16 COMBAT PILOT	9.95	IKARI WARRIORS	5.95	PEPSI MAD MIX	5.95 9.95	STRIP POKER 2	6.95
ARC OF YESOD	2.00	FAIRLIGHT 2	2.00	IMPACT	6.95	PETER BEARDSLEY	6.25	SUMMER OLYMPIAD	5.95
ARKANOID	3.50	FAIR MEANS OR FOUL	5.45 8.95	IMP MISSION 2	6.95	PHM PEGASUS	6.95 10.95	SUPER HANG ON	7.45
ARKANOID 2 REVENGE	5.50 9.95	FERNANDEZ MUST DIE	6.95 9.95	INGRID'S BACK	9.95 12.95	PITFALL 2	1.50	SUPERSOCCER	2.95
ARMY MOVES	3.95	FINAL MATRIX	2.00	INTENSITY	5.00	PLATOON	6.95	SUPERSPORTS	5.95 9.95
ARTURA	5.95 8.95	FIRETRAP	2.95	INT KARATE	2.95 4.95	PREDATOR	7.45	SUPERSPRINT	2.95
ATHENA	3.95	FISH	9.95	IRON LORD	8.95 13.95	PRO SOCCER SIM	5.95 8.95	SUPREME CHALLENGE	8.95 11.95
BALLBREAKER	2.00	FIST & THROTTLES	8.45 9.95	JEWELS OF DARKNESS	9.95	PUFFYS SAGA	6.95 10.45	10 MEGA GAMES	9.95 10.95
BARBARIAN PSYGNOSIS	6.95	FIVE COMPUTER HITS	3.95	KARATE ACE	10.45 12.95	PUFFYS SAGA	5.95 9.95	20 CHARTBUSTERS	6.95
BARBARIAN 2 PALACE	6.95	FLIGHT ACE	9.95	KINETIK	1.50	RED OCTOBER	9.95	TAITO COIN OPS	11.95
BARDS TALE 1	6.95	FLIGHTSTONES	6.25	KNIGHTORC	9.95	RETURN OF JEDI	6.95 9.95	TARGET RENEGADE	4.95
BATMAN CAPED CRUS.	6.25 9.95	FLYING SHARK	5.50	KONAMI COLL.	6.95 12.95	REX	6.95 10.45	TECHNO COP	5.95 10.95
BEST OF BEYOND	2.95	FOX FIGHTS BACK	6.00 8.95	KRAKOUT	2.95	ROAD BLASTERS	6.95 10.95	TERRORPODS	6.95
BEST OF ELITE VOL 1	3.95	FOOTBALL DIRECTOR	6.00	LANCELOT	9.95 11.95	ROBIN OF WOOD	1.95	THE GAMES SUMMER	6.95 10.95
BEYOND ICE PALACE	5.95 9.95	F15 STRIKE EAGLE	6.95	LASER SQUAD	6.95	ROBOCOP	6.45 9.95	THE GAMES WINTER	6.95 10.95
BIONIC COMMANDO	6.95	F16 COMBAT PILOT	9.95 12.95	LAST NINJA 2	8.95	ROLLING THUNDER	6.95	THUNDERBLADE	6.95 9.95
BLACK LAMP	3.95	FOOTBALL MANAGER	2.95 4.95	L'BOARD PAR 3	10.95 13.95	ROMPER ROOM	2.00	THUNDERCATS	5.95
BLACK TIGER	6.95	FOOTBALL MANAGER 2	6.95 9.95	LED STORM	6.95 10.95	ROY OF ROVERS	6.95 9.95	TIGER ROAD	6.95 9.95
BOMBUIZAL	6.45	FREDDY HARVEST	2.95	LIVE AMMO	6.95 10.95	RTYPE	6.95 10.45	TIME & MAGIC	9.95 9.95
BOUNCES	2.00	FROSTBYTE	2.00	LIVE & LET DIE	6.95 9.95	720	6.95	TIME STOOD STILL	5.50 9.95
BUBBLE BOBBLE	5.45 8.95	FUTURE KNIGHT	2.00	MAGBALLS	5.50	SAI COMBAT	2.95	TOTAL ECLIPSE	6.95 9.95
BUGGY BOY	5.50	GAME OVER	3.50	MAGNIFICENT 7	6.95 12.95	SALAMANDER	5.50	TRACK SUIT MANAGER	6.95
BUTCHER HILL	6.45 10.95	GAME OVER 2	6.95 9.95	MARAUDER	6.95 10.95	SAMURAI WARRIOR	4.95	TRAIN ESCAPE	6.95 10.45
CALIFORNIA GAMES	3.95 10.95	GAME SET & MATCH	8.95 11.95	MATCHDAY 2	4.95	SAVAGE	5.50	TRANTRON	6.95
CAPTAIN BLOOD	9.95	GAME SET & MATCH 2	8.95 11.95	MEANSTREAK	2.95	SDI (ACTIVISION)	7.45	TRIO PACK	3.50
CARRIER COMMAND	6.95 13.95	GARFIELD	6.00	MEGA APOCALYPSE	6.95 10.45	SHADLINS ROAD	2.95	TRIV PURSUIT	9.95
CIRCUS	6.95 10.45	GAUNTLET	2.95	METAPLEX	2.95	SHOOT OUT	6.95 10.45	TRIV PUR NEW BEG	9.95
COMBAT SCHOOL	5.45 9.95	GAUNTLET 2	6.95	METROCROSS	2.95	SIDEARMS	6.95	TYGER TYGER	5.00
COMET GAME	1.00	GIANTS	10.45 13.95	MIAMI VICE	2.95	SIDEWIZ	2.95	TYPHOON	5.50
CROSSWIZE	4.95	G.I. HERO	4.95	MICKEY MOUSE	6.95 9.95	SILENT SERVICE	6.95	ULTIMATE COLLECTION	9.95
CYBERNOID 1 OR 2	6.45	G. LINEKER HOTSHOT	6.95 10.95	MINDFIGHTER	9.95	SILICON DREAMS	9.95	UNTOUCHABLES	5.95 9.95
DALEY THOMPSON 88	6.50	GOLD SILVER BRONZE	10.45 12.95	MINI PUTT	6.95 10.45	SKATEBALL	6.95 10.45	VECTRON 3D	2.00
DARK FUSION	5.95 8.95	GUERRILLA WARS	5.95 9.95	MOTOR MASSACRE	5.95 8.95	SKATECRAZY	5.95 10.95	VICTORY ROAD	5.00 9.95
DARK SIDE	6.95 9.95	GUILD OF THIEVES DISC	9.95	1943	6.95 9.95	SKATE OR DIE	6.95 10.45	VINDICATOR	5.00
DOOMDARKS REVENGE	2.00	GUNSHIP	2.00	19 BOOTCAMP	6.95	SOLDIER OF FORTUNE	5.00 8.95	VIRUS	5.50
DOUBLE DRAGON	6.95 9.95	GYRON	6.95 9.95	NEMESIS THE WARLOCK	2.00	SOLDIER OF LIGHT	5.95	VIXEN	6.50 10.45
DRAGON NINJA	6.95 9.95	HARD GUY	1.00	NETHERWORLD	5.95 9.95	SOLID GOLD	7.45 10.95	WE ARE THE CHAMPIONS	6.95 12.95
DYNAMIC DUO	5.45	HEADCOACH	2.00	NIGEL MANSELL GP	6.95	SPACE ACE	10.45 12.95	WEC LE MANS	5.95 9.95
EARTHLIGHT	3.95	HEARTLAND	2.95	NIGHTRAIDER	7.45	SPINDIZZY	2.00	WHIRLIGIG	4.95 8.95
			2.00	NODES OF YESOD	2.00	SPITTING IMAGE	6.95 9.95	ZENJI	1.50

Please send cheque/PO/Access/Visa No. and expiry date to: TRYBRIDGE LTD, 72 NORTH STREET, ROMFORD, RM1 1DA.

Please state make and model of computer when ordering. P & P inc. UK on orders over £5.00. UK orders under £5.00 add 50p per item. Europe add £1.00 per item. Elsewhere add £2.00 per item. THESE OFFERS ARE MAIL ORDER ONLY.

Tel. Orders: 0708 765271



"Clive Drive"™ The Drive Built for the SPECTRUM

Replace the slow and load error prone cassette with the "Clive Drive".

- Gives faster save and load facility with verify. Responds to all Spectrum drive commands, like - format - merge - cat and others.
- Built-in Power Supply.
- Inexpensive Media.
- Drive and Printer Interface included.
- Disc Drives are also available for many other systems which provide an external port.

Clive Drive Specifications:

- 200 Sectors/Side
- 256 Bytes per Sector
- Total 50K/Side
- 2 Sides per disk, just flip over
- Typical Access Times:
- Format 24 Sec
- Save 13 Sec
- Load 13 Sec
- Save & Verify 16 Sec

Clive Printer

- 80 Characters per second on 8.5" thermal paper.
- 80 column of normal Tx6 matrix characters.
- 160 column of condensed characters.
- 40 column of expanded characters.
- fully dot addressable graphics.
- inverse printing.
- vertical tabs, various line spacing.
- fixed and programmable column tabs.
- bi-or-uni-directional printing.
- full ASCII and international character sets.

A Superior value from

ERGO SYSTEMS Ltd.

Ireland



Unit T9, Stillorgan Industrial Park, Stillorgan, Co. Dublin, Ireland. Tel: 353-1-952529. Fax: 353-1-953625. Telex: 91810



Nottingham NG12 3DZ.

DOUBLE VISION

Spiral Arms II is now in the strange position of being run simultaneously by two UK companies. Apparently both, **Sloth Enterprises** and **Spellbinder Games**, have bought the rights from the American **Graaf Simulations**. Both UK versions have now been launched and have a few differences, mainly price. Sloth have decided to run the game on an increasing turn fee. Start-up and the first two turns come free, turns 3 to 10 cost £1.50, turns 11 to 20 cost £2 and turns 20+ cost £2.50. Spellbinder, however have opted for a set turn fee of £1.50 which works out a lot cheaper if you play to the end (around 40 turns).

The Sloth version of *Spiral Arm II* has been streamlined, however, and several of the more complex aspects re-written. Spellbinder's program remains almost identical to Graaf Simulations' version. Having not seen Spellbinder's rulebook I can only comment on Sloth's attempt, which is pretty impressive, with nice some pictures of Clangers! The rules are easy to follow and nicely structured allowing you to make a fast and unconfused start. The game itself is all about conquering the galaxy! Original concept, hey? I'd be glad to hear from anyone playing both games, which is best. Contact Sloth at **PO BOX 82, Southampton SO9 7FG** and Spellbinder at **PO BOX 60, Wath-upon-Deerne, Rotherham, S Yorks S63 7PR**.

American city of The Thirties which has just broken free of the mafia boss, Vito Spaghetti. Your aim is to replace him by eliminating seven other players with similar ambitions. After that you must wipe out Elliott Mess and his incorruptible 'unmentionables'.

The game is simple to play but contains twenty different orders and some nice little complexities designed to keep all the mob bosses on their toes. It's like *It's A Crime*, only funnier, easier and cheaper at £1 per turn for 14 orders. £2.50 will get you a start-up package and two turns. Turns are a regular eight days (UK) or 15 days (Europe). Contact *On The Brink*, Brink House, 18 Salvin Close, Cropwell Bishop,

No promises for next month (because I invariably get it wrong), so just wait and see...

THE PBM GAME THAT NEVER WAS

A couple of new PBM games delight **IAN LACEY** this month, but only after all the grovelling apologies have been made over games misnamed, games that don't exist, interviews missed...

FIRST OFF I must apologize for the mistake in last month's column. *Warlord* is *Casus-Belli II* and *Crucible Of Power* does not exist! After announcing that *Casus-Belli II* would be called *Crucible Of Power*, **KJC Games** then changed the name again (to *Warlord*) without any formal announcement. Their fault, not mine, honest! I must also apologize to those who looked forward (myself included) to the *Project Basilisk* interview, mentioned in the Christmas

issue, I had banked on them attending the **Northern Convention**, which they did not. My fault this time, but an interview will appear shortly.

SPAGHETTI GANGSTERS

The new PBM company *On The Brink*, first mentioned in Issue 60 with their futuristic sport game *Skullball*, are now launching their second game. Called *Mobster*, this is a humorous game involving mafia bosses set in San Corrupto, a fictitious



Bemoaning his lack of space – for just one game-packed issue – **PAUL EVANS** takes us on a quick tour of what's new on-line

ONE OF the biggest establishments in the world of computer training, **ITEC** has just launched a new on-line service providing all kinds of SIGs for everything from building to teaching! It's pretty vague what the actual system contains but if you wish to try it, it's free and open 24 hours a day

on (0642) 219704. The system requires scrolling software and a 300/300 baud modem. To learn more, phone **Graham Robinson** on (0642) 232550 ext. 20.

SHINE ON YOU CRAZY DIAMOND!

Another board has recently been

launched, called **Diamond Viewdata**. It's a general information board, with a few SIGs, and is run on Ruby-Tel, an Amiga package. When I took a poke around, there was not much open and the frames were not very imaginative to say the least! Diamond promises information on builders, motoring, restaurants, florists, dental services (?), golf clubs, car hire and many more, as the blurb points out. See what you think anyway, it's viewdata standard on 0923-228558.

BETTER SERVICE

If you are a member of the home shopping system, **Shop-Tv**, then you may have guessed that it has connections with the new catalogue shop, **Index**. Because of this new link-up, warehouse services have been improved and there is a seven day promise

on all items and free delivery!

+3 PROBLEMS

It's a shame that the +3 expansion bus was redesigned to make sure it would be incompatible with everything in the universe. I've just had another letter, this time from Mr PV Salvage, asking how he could get his VTX 5000 modem to work with it. Unfortunately there's no way, due to the re-arranged power lines – you'll have to get a new modem. Issue 54 had a look at one such item, the Spectre Comms pack from **Spectre Comms Ltd, The Old School House, Tenter Row, Crosby, Ravensworth, Penrith, Cumbria CA310 3JA**. Their telephone number is 0931 5362 and the pack is £49.95, also available with a Tandata QMOD for £99.95.

Ok, next time we shall be looking at a few other boards that are available for us. Don't forget to send info on your board if you run one! Tra!

DATTEL ELECTRONICS



ROBOTARM

FULL FUNCTION WITH 5 AXIS MOVEMENT

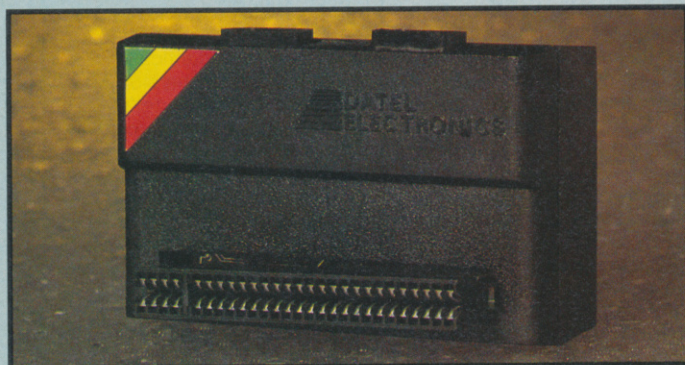
- ❑ Explore the fascinating science of Robotics with this fantastic full feature Robot Arm.
- ❑ Human like dexterity - with 5 axis of movement it is so versatile it can manipulate and pick up any object as small as a paper cup or as big as a tennis ball.
- ❑ Easily controlled using 2 joysticks (any 9 pin type) or connected to your Spectrum with our special Interface/Software to give Computer/Robotic control. (see Interface offer).
- ❑ Comes with accessories including: Standard Grip Jaws to mimic finger type grip; Magnetic Finger Adaptor with release mechanism; Shovel Attachment for materials handling; 4 Stabilising Legs for heavier lifting jobs.
- ❑ Uses 4 HP2 batteries (not supplied) to power motor movement.

ONLY £49.99

INTERFACE OFFER

- ❑ Unique Interface/Software package to allow you to interface and control the Robotarm with your Spectrum.
- ❑ Train mode allows you to store and then repeat arm movement sequences.
- ❑ Computer and Robotic control is a major subject in schools and colleges - this is a unique introduction.
- ❑ This Interface is not needed to be able to use Robotarm but it makes possible interfacing the Robotarm/Computer.
- ❑ Very easy to use.
- ❑ Instructions included

ONLY £19.99



DUAL PORT JOYSTICK INTERFACE

- ❑ Can also be used with two joysticks with games that allow simultaneous two player control.
- ❑ 2 joystick ports - Kempston type - one Cursor type.
- ❑ Accepts any 9 pin joystick including rapid fire types.

ONLY £8.99



NEW QUICKSHOT TURBO

- ❑ Complete with Interface - plugs straight into Spectrum (all models).
- ❑ All the features of the best selling Quickshot II plus;
- ❑ Microswitch action for even longer life.
- ❑ Extra rugged construction.
- ❑ Superb styling.

ONLY £17.99 COMPLETE



SNAPSHOT II

- ❑ Now you can backup your games to microdrive or tape.
- ❑ Special compacting techniques.
- ❑ Add pokes or peek programme then restart.
- ❑ Built in joystick interface (Kempston system).

£24.99 POST FREE



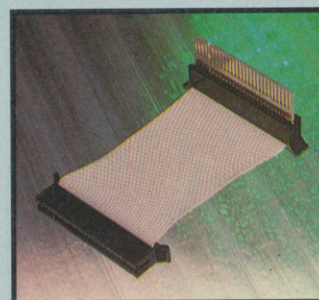
GAMES ACE

- ❑ Accepts any 9 pin joystick plus - delivers sound from games through TV speaker (fully controllable).

ONLY £10.99

Complete with Quickshot II
ONLY £17.99

or complete with Quickshot Turbo
ONLY £21.99



EXTENSION CABLE

- ❑ Distance peripherals from your computer.
- ❑ Top quality connections.

ONLY £8.99

TWO WAY EXTENSION

- ❑ Allows peripherals to be connected together (memory conflicts allowing).

ONLY £10.99

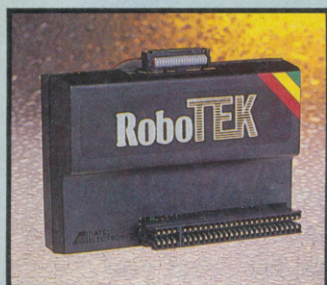


DIGITAL SOUND SAMPLER

- ❑ Permits recording any sound digitally into
- ❑ Replay at variable pitch or with amazing effects.
- ❑ Forwards/backwards/with reverb/echo/flanging etc., etc.
- ❑ Fully menu driven.
- ❑ Complete hardware/software package.

ONLY £34.99

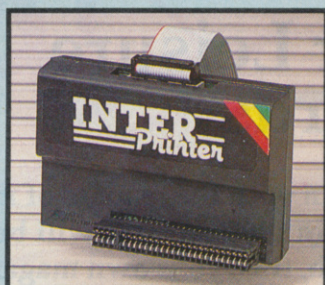
DATTEL ELECTRONICS



ROBOTEK

- ☐ Robotics & model control made easy on Spectrum.
- ☐ 4 independantly controlled outputs for relays, models, lights etc.
- ☐ 8 independant inputs for sensing etc.
- ☐ This is the product that the Lego Publication "Make and program your own robots" was based on.
- ☐ Comes complete with cables.

ONLY £29.99



INTERPRINTER

- ☐ Connect fullsize Centronics printers to your Spectrum.
- ☐ Complete with printer cable.
- ☐ HiRes screen dump (Epson).
- ☐ Microdrive compatible
- ☐ Compatible with Tasword 2.
- ☐ Easy to use.

ONLY £24.99



QUICKSHOT II

- ☐ The world's top selling joystick.
- ☐ Complete with interface.
- ☐ Maximum compatibility (Kempston system).

ONLY £13.99

- ☐ Auto fire/rapid fire.
- ☐ Plugs straight into Spectrum/Plus/+2/+3 etc.
- ☐ Stabilizing suction cups.
- ☐ Complete - no more to buy.
- ☐ Top & trigger fire buttons.

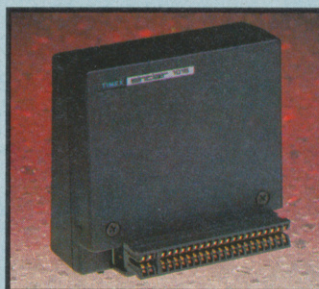


LIGHTWRITER

- ☐ Just plug in and draw circles, rectangles, squares & freehand drawing.
- ☐ Choose inks, papers, erase, fill etc.

- ☐ Save results into memory or tape.
- ☐ Menu driven.
- ☐ Animate screens from memory.
- ☐ Complete package includes lightpen & interface plus software.

ONLY £14.99 COMPLETE



16K RAMPACKS FOR ZX 81

- ☐ Brand new guaranteed Sinclair product.
- ☐ Simply plug in for 16K.
- ☐ Limited availability.

ONLY £5.99



DATA RECORDER

- ☐ Fully compatible Data Recorder.
- ☐ Top quality for reliable results.
- ☐ Free tapehead Cleaner.

ONLY £24.99

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BY PHONE

0782 744707
24hr Credit Card Line

BY POST

Send cheques/POs made payable to "Datel Electronics"

FAX

0782 744292

UK ORDERS POST FREE
EUROPE ADD £1
OVERSEAS ADD £3

PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS
AND SUBJECT TO CHANGE WITHOUT NOTICE

CALLERS WELCOME - Please reserve goods by telephone prior to visit.

DATTEL ELECTRONICS

DATTEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND.

SALES ONLY
0782 744707

TECHNICAL ONLY
0782 744324

LEADS etc.

+3 CASSETTE ADAPTOR LEAD

- ☐ Now you can connect your +3 to a cassette recorder.
- ☐ 2ft long.

ONLY £3.49

REPLACEMENT CASSETTE LEADS

- ☐ For 48/128/+2.

ONLY £3.49

+2 JOYSTICK ADAPTOR LEAD

- ☐ Allows standard 9 pin joysticks (Quickshot II/Turbo etc.) to be used on +2/+3 computers.
- ☐ Supports rapid fire models.

ONLY £2.99

REPLACEMENT T.V. LEAD ALL MODELS

ONLY £3.49

VOTE FOR THE BEST IN 1988

Computer Leisure Awards

For the first time ever, you will be able to join with the readers of many other British magazines to decide who and what was best in 1988. Awards will be made to software producers resulting from your voting through, this, your own magazine, for what you considered to be the best games you have played on your computer during the past year.

Many other magazines are carrying this voting form. It means the results will truly be democratic, and therefore really mean a lot to those who receive them.

The votes will be collated by an independent company, to whom you should post your voting form, and the awards will be presented at the Computer Leisure Industry's 'get together' — Computer Arena — in March 1989.

So, simply fill-in the voting form below, cut it out (or photocopy it) and send it to:

GAMES OF THE YEAR
MICHAEL BAXTER
SOLUTIONS PR
2 WELLINGTONIA COURT
VARNDEAN ROAD
BRIGHTON BN1 6TD

COMPUTER LEISURE AWARDS 1988 VOTING FORM

Closing date 25th Feb '89

1) Please tick the computer format you are voting for:

AMIGA ☐
AMSTRAD CPC ☐
ELECTRON ☐
COMMODORE 64/128 ☐
PC COMPATIBLES ☐
ATARI ST ☐
SPECTRUM ☐

3) Please state what you consider to be the BEST GAME OVERALL of 1988:

4) Which Software House do you choose as being the most consistent in producing high quality computer games during 1988:

2) Please name your choice of best game (from the format ticked above) of 1988:

1. Best ARCADE game

2. Best ADVENTURE game

3. Best STRATEGY/WAR game

4. Best MUSIC with game

5. Best USE OF GRAPHICS

Name

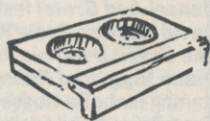
Address

.....
.....Postcode



GOGGLE!

Douglas is double-billed!!



No doubts who this month belongs to: since from CBS/Fox we have **Wall Street** (15), and from CIC Video **Fatal Attraction** (18). Starring in both is **Michael Douglas** whose mesmeric performance in the former won him the best actor Oscar. The irony of the film is that **Platoon** director **Oliver Stone** wrote the script as an old-fashioned morality tale, with Douglas as an evil stock broker corrupting protégé **Charlie Sheen**. In the event Douglas's powerful performance had American audiences cheering as he declared 'Greed is good'. By contrast, Sheen seems weak and ineffectual, damaging a good, if flawed movie.

Adrian Lyne's Fatal Attraction stirred controversy over its anti-

feminist depiction of **Glenn Close** as independent career woman turned monster, but there's no doubting its power as a thriller. Once again Douglas turns in some great acting, this time as a weak-willed family man whose weekend affair with Close starts her fatal obsession.

By contrast **The Unbearable Lightness Of Being** (18, CIC Video) is, at three hours, a much less strongly-driven film and with frequent nudity unlikely to be as popular family viewing. Nevertheless the obsession this time is with freedom, independence and love rather than violent vengeance.

Firmly back in the mainstream we have **Sir Richard Attenborough's Cry Freedom** (CIC Video). Set in South Africa this tells the story of native journalist



Donald Woods, a white man who becomes sympathetic to black activist Steve Biko. Based on a true story it's a pity that, due to problems in getting finance, the film follows Woods and his escape from S Africa rather than Biko, who was eventually murdered by the S African police. With several spectacular recreations of such infamous events as the 1976 Soweto massacre this big-budget film should prove popular on rental.

A moral tale on a smaller scale is told by **The Principal** (18, RCA/Columbia). The eponymous hero is **James Belushi** who, with security guard **Louis Gossett Jr** and history teacher **Rae Dawn Chong**, sets about turning the city's toughest school into a model of scholastic achievement.

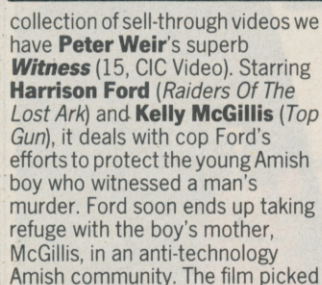
Firmly resisting moralizing of any type whatsoever we also have **Police Academy 5** (PG, Warner). The absent-minded head of the Academy, **George Gaynes**, is due for retirement but before heading off into the sunset accidentally switches bags with some diamond smugglers. The criminals swiftly kidnap Gaynes, and soon suffer the

indignity of being pursued by some of the Academy's most incompetent graduates (better than 4, but still not much cop – groan). Showing more originality, if not too much successful humour, is **Dona Flor And Her Two Husbands** (18, RCA/Columbia). Still, the dazzling **Sonia Braga** (*Kiss Of The Spider Woman*) is always worth watching.

A much bigger star, but only physically, features in **The Incredible Hulk Returns** (PG, New World Video). A US TV movie it arrives here on video with **Lou Ferrigno** as the Hulk, and **Bill Bixby** as his mild-mannered alter ego, David Banner. Apparently Banner has settled down at a scientific institute and is hopeful that his latest invention – the Gamma Ray Transponder – will cure him. Sadly the military are only interested in the device's potential as a weapon. Meanwhile a former student of Banner claims to be able to bring another Marvel Comics hero, The Mighty Thor, out of the past and into the present day...

Heading up this month's





Where would Et Al be without **Warner Home Video**? The **Fairy Tale Collection** is their latest

Fantasy of a distinctly different sort is on offer in **Tommy** (15, Warner Bros). The film version of **The Who's** rock opera double album it stars **Roger Daltrey** as the Pinball Wizard of the World and Superstar Messiah. Also appearing are **Ann-Margaret**, **Elton John**, **Oliver Reed** and **Tina Turner**. At



94 CRASH February 1989

Skill.....Tactics.....Strategy.....Decisions.....Excitement.....Tension.....Action

FOOTBALL & CRICKET

QUALITY STRATEGY GAMES from E & J SOFTWARE (Established 1984)

EUROPEAN CHAMPIONS ★ NEW ★ THE INTERNATIONAL CHALLENGE OF THE EUROPEAN NATIONS CUP - Genuine Nations Cup Format with full Random Draw of 32 Seeded Teams - Fixture List, Results and League Tables of All 8 Groups - Discipline & Medical Reports - Squad of 22 Players plus Other Players available - 17 Month Itinerary of Qualifying Group (Arrange Friendlies) and Finals - Plus many more Superb Features and Options. **EUROPEAN CHAMPIONS** includes E & J's **MATCH PLAY SYSTEM** an imaginative and exciting new style of match presentation which captures the ACTION, DRAMA & TENSION of International Football.

WORLD CHAMPIONS - A COMPLETE WORLD CUP SIMULATION - Select Friendlies - 25 Players - Qualifying Group - 2 In-Match Subs - Discipline Table - Select Tour Opponents - Extra Time - Final Rounds - Players Gain Experience - 7 Skill Levels - **TEXT MATCH SIMULATION** including: Bookings, Goal Times, Named & Recorded Goal Scorers, Injury Time, Corners, Free Kicks, Match Clock, Penalties - PLUS many more Features.

PREMIER II - CAN YOU HANDLE ALL OF THIS? - Play all Teams Home & Away - Unique Transfer Market - Team & Substitute Selection - Named & Recorded Goal Scorers - Injuries - Transfer Demands - Continuing Seasons - Squad Listing All Teams Financial Problems - 7 Skill Levels - Offers to Manage other Teams - Sackings - Managers's Salary - Save Game - Team Styles - Bank Kicks - AND many more Features.

EUROPEAN II - THE MOST COMPLETE SIMULATION OF EUROPEAN CLUB FOOTBALL YOU CAN BUY - Home & Away legs - Full Penalty Shoot-Out (with SUDDEN DEATH) - 2 In-Match Subs - Away Goals count Double (if Drawn) - Full Team & Sub Selection - Extra Time - 7 Skill Levels - Enter your own **PREMIER II** Winning Team - **TEXT MATCH SIMULATION** plus Sending Off and Disallowed Goals - Results Table - PLUS MUCH MORE!

CRICKET MASTER - A SUPERB SIMULATION OF ONE DAY INTERNATIONAL/COUNTY CRICKET - Weather, Wicket & Outfield Conditions - Batting & Bowling Tactics - Team Selection - Fast, Medium & Spin Bowlers - 4 Types of Batsmen - Select Field Layout - 3 Skill Levels - Wides - Byes - No Ball - Run Out - Misfield - Dropped Catches - Scoreboard - Batting & Bowling Analysis - Run Rate - Single Option - 3 Game Speeds - **STAR FEATURE** a complete **MATCH OVERVIEW** showing Ball by Ball Action and Commentary and MUCH MORE!

TEST MASTER ★ NEW ★ A COMPREHENSIVE SIMULATION OF A 5 DAY TEST MATCH - Includes most of the Features of **CRICKET MASTER** and **MATCH OVERVIEW** plus Declarations - Nightwatchmen - Light Meter - Rain Stops Play - Varying Number of Overs per Day - Follow On - Save Game - New Ball - Bad Light Interruptions - **TEST MASTER** is a True representation of a Complete Test Match and offers the **ULTIMATE CHALLENGE** to All Cricket Enthusiasts.

CRICKET MASTER & TEST MASTER prices include a FREE pad of **SCORESHEETS**

Software availability	Spectrum Any 48/128K		Commodore 64/128K		Amstrad CPC	
	Tape	Disc + 3	Tape	5 1/4" Disc	Tape	3" Disc
EUROPEAN CHAMPIONS	£7.95	£11.95	n/a	n/a	n/a	n/a
WORLD CHAMPIONS	£6.95	£10.95	£7.95	£10.45	£7.95	£11.95
PREMIER II	£6.95	£10.95	£7.95	£10.45	£7.95	£11.95
EUROPEAN II	£6.95	£10.95	£7.95	£10.45	£7.95	£11.95
CRICKET MASTER	£7.95	£11.95	£8.95	£11.45	£8.95	£12.95
TEST MASTER	£8.95	£12.95	n/a	n/a	n/a	n/a

FANTASTIC VALUE: Special Discount of £2.00 for every EXTRA game purchased (e.g. buy 2 Games deduct £2.00 from TOTAL - buy 3 Games deduct £4.00 from TOTAL - 4 Games £6.00 etc).

ALL GAMES are available by **MAIL ORDER** for IMMEDIATE despatch by 1st class post and include Full Instructions. (OUTSIDE UK please add £1.00 for postage and send payment in Pounds Sterling only).

PLEASE STATE WHICH MACHINE AND TAPE OR DISC. Cheques or Postal Orders payable to E & J Software.

Send to: E & J SOFTWARE, Room 3, 37 Westmoor Road, ENFIELD, Middlesex EN3 7LE.

AT LAST!

SPECTRUM SPARES

AT REALISTIC PRICES

All prices include post/packing, handling and VAT

ULA 6C001	£11.99	SPECTRUM K/BOARD MEMBRANE	£4.99
128k ROM	£11.99	SPECTRUM K/BOARD MAT	£8.99
Z80A	£2.99	SPECTRUM K/BOARD TEMPLATE	£4.99
7805 REG	£1.49	SPECTRUM+ MEMBRANE	£9.99
4116 RAM	£1.49	MODULATOR	£9.99
SPEC PSU	£10.49	S/MANUAL	£22.99

Remember all prices include P & P, handling and VAT

Full spares list available / Trade enquiries welcome

Access/Visa or Postal Order Cheques.

SPECTRUM REPAIRS £9.99 + PARTS+CARRIAGE+V.A.T.

ELECTRONIC SERVICES

176 VICTORIA ROAD WEST, CLEVELEYS, BLACKPOOL FY5 3NE
Tel. (0253) 822708

COMPUTER REPAIRS

Fixed Super Low Prices!

Inclusive of parts, labour and VAT



FIRST AID
FOR
TECHNOLOGY

1 week turnaround

★ SPECIAL OFFERS ★

SPECTRUMS	£14 + Free Game	AMSTRAD 464	£32 + Free Game
SPECTRUM 128	£18	C64	£22 + Free Game
SPECTRUM +2	£22 + Free Game	C16	£18
SPECTRUM +3	£32	BBC	£38
SPECTRUM P.S.U. for sale	£10	ELECTRON	£29
SPEC JPYSTICK INTERFACE for sale	£6.50	C64 P.S.U. for sale	£20
VIC 20, C+4	£22		

Please enclose payment with item - 3 month warranty on repair
Please enclose advert with repair

W.T.S. ELECTRONICS (CR)

Studio Master House, Chaulend Lane, Luton, Beds. LU4 8EZ. Tel: 0582 491 949

All rights reserved

ONE OF THE BIGGEST SELLING GRAPHIC PROGRAMS

CRASH SAID...
Clearly
Superior
(to Art Studio)

YS SAID
Just when
you
thought it
was safe
to buy
Art
Studio

IT EVEN HAS A DEMO MODE!!

DO NOT
DISCOUNT
YOUR
INVESTMENT

INCLUDES
FREE
GIFT
OF 99

POSTER MACHINE

Produce Posters and Banners of all shapes and sizes (HIGHLY ADDICTIVE!)

Poster Machine	£5.95
Animator1 (48/128)	£12.99
Animator1+D/Deciple	£14.95
Animator1+3	£19.95
Spanish Manual	£9.95

HIGHLY ADDICTIVE!

SINCLAIR USER
Beats the Art Studio &
the Artist - puts Art
Studio to shame

GREAT
FOR
CARTOONS

Fast & easy to use -
Animator1's great
addictive fun for the hobbyist
- yet so powerful
it's used by
software houses.
Find out why it's
one of the biggest
selling...

STOP PRESS!
NOW AVAILABLE IN
A GREAT NEW PACKAGE
FEATURING A
SPECTACULAR FULL
COLOUR AT A GLANCE
OPTION IN ADDITION
TO NO MANUALS TO MAKE
INSTANT GRAPHIC
DESIGN FUN!

SOFTCAT

AVAILABLE AT YOUR LOCAL STOCKIST OR DIRECT THROUGH OUR FAST MAIL ORDER (P&P FREE (export add £2.00)) CHEQUES / P.O.s PAYABLE TO SOFTCAT
MICROS, DEPT. P784, GATEWAY HO, 78 WATERS GRN, MACCLESFIELD, CHES. SK11 6QH

HOTLINE 0625 615379

The Instant Catalog

10 Computer Hits Vol 5.....	8.75	G Lineker's Hotshot.....	5.50	Question of Sport.....	9.99
10 Great Games Vol 3.....	8.95	Game Over II.....	6.50	R-Type.....	6.45
1943 - Battle of Midway.....	6.25	Game Set And Match 2.....	8.75	Rambo III.....	5.99
4 Soccer Simulators.....	6.45	Games - Winter Edition.....	6.99	Return of the Jedi.....	6.45
6 Pak Vol 3.....	6.45	Garfield.....	5.99	Revenge.....	6.75
After Burner.....	6.45	Giants.....	9.99	Ring Wars.....	5.99
Allen Syndrome.....	5.95	Gold Silver Bronze.....	9.99	Risk.....	6.99
Artura.....	5.99	Guerrilla War.....	5.25	Road Blasters.....	5.99
Barbarian 2.....	6.45	Gunship.....	6.45	Robocop.....	5.25
Bard's Tale.....	6.50	Hellfire Attack.....	6.75	Roy Of The Bovers.....	5.25
Batman - Caped Crusader.....	5.95	History in the Making.....	16.95	SDI.....	6.45
Bionic Commando.....	6.65	Impossible Mission II.....	6.99	Salamander.....	5.25
Black Tiger.....	5.99	In Crowd - Compilation.....	8.75	Saxxon.....	5.99
Bombuzal.....	5.50	Intensity.....	5.25	Savage.....	5.95
Butcher Hill.....	5.50	Karate Ace.....	8.95	Silent Service.....	6.45
Carrier Command.....	9.95	Konami Arcade Collection.....	6.95	Soldier Of Fortune.....	5.25
Circus Games.....	6.25	L&D Storm.....	6.45	Space Ace.....	9.99
Command Performance.....	7.50	Lancelot.....	9.95	Space Racer.....	5.99
Computer Music's Diary.....	4.50	Laser Squad.....	6.25	Spitting Image.....	6.45
Cyberoid II.....	5.50	Last Ninja II.....	8.95	Street Fighter.....	5.95
Daley's Olympic Challenge.....	6.45	Leader Board Par 3.....	9.99	Strip Poker 2 Plus.....	5.25
Dark Fusion.....	3.50	Live Ammo.....	6.99	Super Hang On.....	6.45
Dark Side.....	6.45	Live And Let Die.....	5.99	Super Sports.....	5.50
Double Dragon.....	5.50	Magnificent Seven.....	6.75	Superman - Man of Steel.....	5.99
Dragon Ninja.....	5.95	Maratona.....	5.99	Supreme Challenge.....	8.75
Dynamic Duo.....	5.50	Maria's Christmas Box.....	6.99	T - Wrecks.....	5.25
Echelon.....	6.95	Mega Games Vol 1.....	9.95	Taito Coin Up Hits.....	8.95
Empire Strikes Back.....	6.45	Mickey Mouse.....	6.99	Ta-hoo Cup.....	3.50
Exploding Fist Plus.....	5.25	Motor Massacre.....	5.50	Thunder Blade.....	8.50
F-15 Strike Eagle.....	6.45	Muncher (128 Only).....	5.50	Tiger Road.....	8.25
Fernandez Must Die.....	5.99	Munsters.....	6.50	Times of Lore.....	6.50
Final Assault.....	6.75	Night Raider.....	5.25	Total Eclipse.....	6.45
Fists N' Throattles.....	8.75	Off Road Racing 4x4.....	5.99	Track Master.....	5.50
Flight Ace.....	9.95	Operation Wolf.....	5.50	Tracksuit Manager.....	6.45
Football Director.....	6.45	Overlander.....	5.25	Trivial Pursuit AMB.....	9.95
Football Manager 2.....	5.95	P Bardsley Int Football.....	5.25	Typhoon.....	5.25
Fox's Flight Back.....	5.99	Pacmania.....	4.95	Ultimate - The Works.....	8.95
Frank Bruno's Big Box.....	8.75	Pepsi Mad Mix Challenge.....	5.50	Victory Road.....	5.25
G I Hero.....	5.25	Power Pyramids.....	5.95	Vindicator.....	5.25
G Lineker's Star Soccer.....	5.50	Pro Soccer Simulator.....	5.99	We are the Champions.....	6.95
				Wee Lee Mums.....	5.99



INSTANT, Boston House, Abbey Park Road, Leicester LE4 5AN

Mail Order Only. State Computer's make and model.

P&P: 50p on orders under £5. EEC 75p per title.

Whole World £1.50 per title for Air Mail.

New titles sent on the day of release.



0533 510102

FOR DISK PRICES & NEW RELEASES PLEASE RING US.

SPACE 1989

This month sees the software houses drawing inspiration from Isaac Asimov's *Fantastic Voyage*, fairy tales, sci-fi space combat and good old mindless street violence. Here's hoping their gameplay's as promising as their scenarios.

Originally written by Stavros 'very good video game' Fasoulas (how's the National Service going, Stav?) and released on the C64, Thalamus now proudly present *Sanxion - The Spectrum Remix*. An evil empire is intent on mankind's destruction and you're all that stands between it and Earth. While I pack my bags you can try and struggle through twelve levels of ferocious aliens, complete with detailed backgrounds and music by CRASH's master of the keyboard Jon Bates, what more could you want? Well, what Thalamus wants is £8.99 for a cassette and £12.99 for a +3 disk.

BLOOD LUST

Bob Morlock is a computer programmer with problems: not only has he a serious cash flow situation but on a trip down the arcades he's met Charles Darwin (1809-1882). And if meeting



▲ Alien-style cockpit controls in *Captain Blood*

someone who's been dead for 107 years isn't bad enough, according to Darwin the world's been invaded by aliens. Don't believe it? Well, just go and look at some of the arcade games. Bob is so worried by this revelation that he runs home to program a computer hero - based on

his heroic self, of course - to save the day. Sadly, due to a glitch which plagues many inferior programmers, once he sets his computer program running he *becomes* his computer hero. This character is called

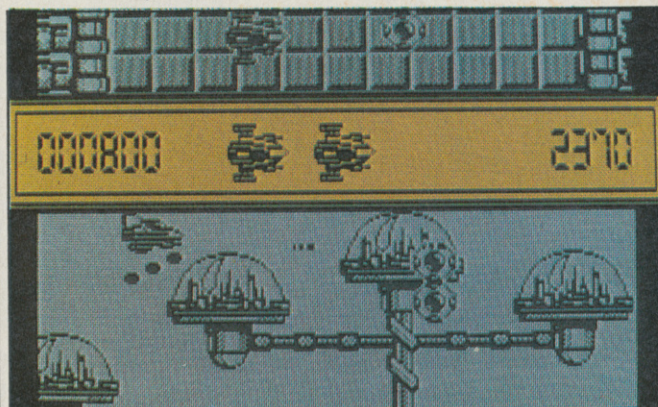
Honk, to warp them out of the area. This Honk does, but sadly a malfunction in the hyperdrive causes Blood to be cloned 30 times, with each clone taking part of his vital body fluids. So before Blood can do anything else, he must find them all and disintegrate them to restore his fluids. What a cock-up! Of course, astute readers have by now realised that this is obviously a French game. Called *Captain Blood* it will be available at £9.95/£14.95 from **Infogrames**. Fortunately for you this unusual arcade/adventure begins with just five clones left to go.

RAF'S FAIRIES

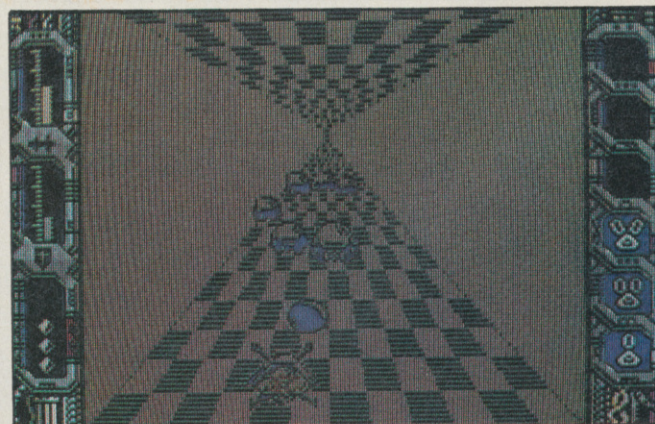
Now one programmer you can expect never to make Morlock's common mistake is **Raffaele Cybernoid Cecco**. In the case of *Stormlord*, however, he might be quite tempted to switch places with his hero. The scenario is that an evil queen has imprisoned a whole load of curvaceous fairies and is now threatening to kill them. Well Raf's hero, the Stormlord, isn't having any of that and sets out to rescue all these attractive young females. This isn't an easy task, however, keys and various other objects have to be col-

Captain Blood and comes complete with a hyperdrive equipped spaceship.

No sooner than Blood realises what's happened than the ship comes under attack from aliens. Not feeling quite up to any heroic acts so soon, Blood orders his ship's bioconsciousness, called



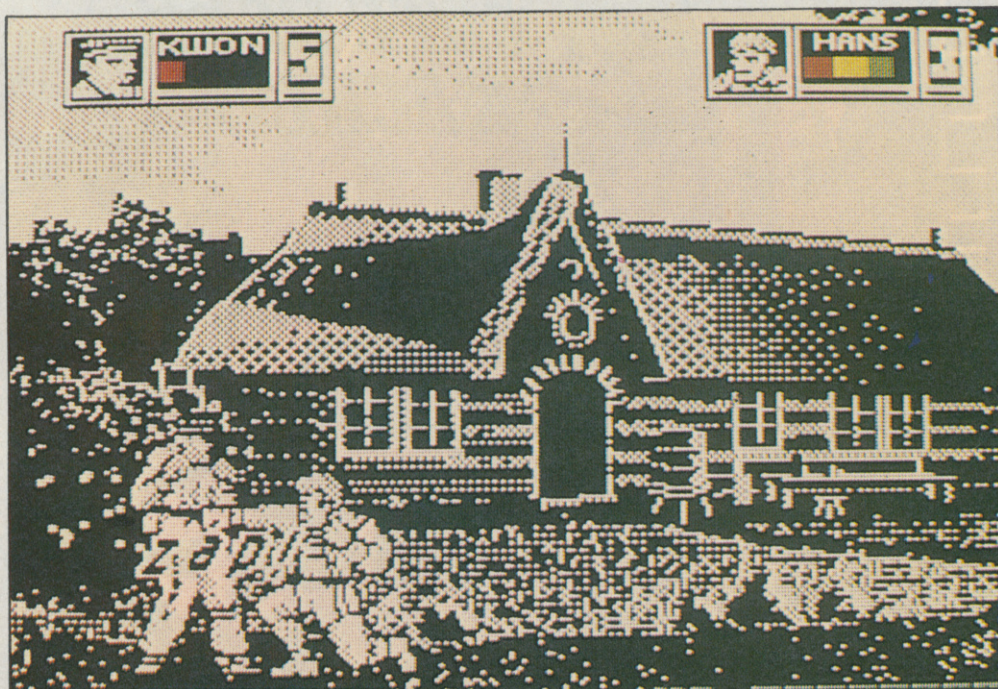
▲ Sideways and overhead views in Thalamus's *Sanxion: The Spectrum Remix*



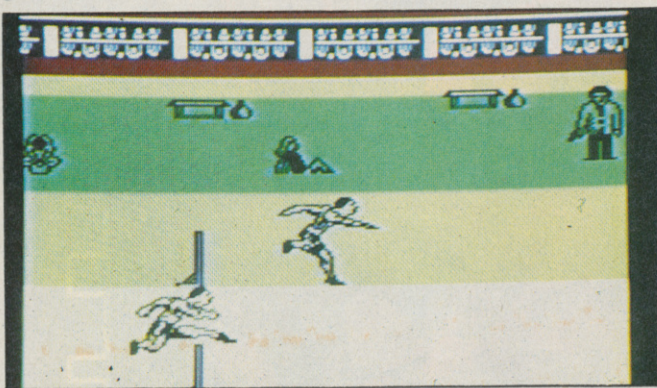
▲ Hewson's *Eliminator* eases on down the cosmic highway

lected, and the evil Queen's minions are everywhere. If you've read this month's Log by Raf then you'll know he brought a demo up to the Towers to show us. And on first impressions *Stormlord* looks excellent, with ultra-smooth scrolling, excellently detailed backgrounds and hardly any colour clash.

Another game due out from Hewson is the rather less whimsical *Eliminator*. Here you play a psychopathic killer, roaring around the galaxy's planet's main roads, eliminating anything that moves (except yourself, of course). Along the way you should also keep an eye out for small pyramids and spheres floating above the road. Collect these to top up your fuel and add more powerful weapons. Fast reactions are needed as your shield energy is only restored at the end of the level. With graphics by **Steve Crow** (the author of *Wizard's Lair* and *Starquake*) this could rival *LED Storm* as 1989's top racing game.



▲ *Human Killing Machine (GO!)* travels the world in search of Judith Chalmers



▲ Only a few hurdles to go before Epyx release *Games: Summer Edition*

ROUGH PLAY

US Gold have had a busy last few months, and to add to the long list of recent releases two new titles should soon be gracing the shelves of your local computer store. Namely these are *Human Killing Machine*, and *The Games: Summer Edition*. In *Human Killing Machine* (the follow up to *Street Fighter*) the brave player takes the part of Kwon, a martial arts expert who has to travel around the world facing some fierce competition in such exotic locations as Moscow, Beirut and Amsterdam. And in true *Street Fighter* tradition a pair of energy bars inform the combatants just how close they are to collapsing. Find out if you're made of the right stuff in February.

On the **Epyx** label comes the latest in sporting simulation games, following on the trail of

The Games: Winter Edition and *Gold, Silver, Bronze* (Issues 56 and 57 respectively). *The Games: Summer Edition* takes you into the gruelling world of sports enthusiasts who lacking the snow to go skiing, ice skating and lugeing, and settle for sprint cycling, pole vaulting, spring board diving and archery. *The Games: Summer Edition* will be available at all good stockists from February.

THE MAN WITH TWO BRAINS

Do you remember a movie called *Fantastic Voyage*? The one with Raquel Welch? (Thought that might jog a few memories.) It was based on a novel by Isaac Asimov where people were shrunk using modern technology and injected into someone's blood stream. Asimov has just written a sequel, as it happens,

but I mention it only because it's a bit similar to **Cascade's** latest; *DNA Warrior*. Your mission is to guide your micro-submersible craft through the body of a scientist who has had a second brain implanted as an experiment. But things have gone disastrously wrong, and the erratic growth of the second brain has to be stopped before the life of a very valuable member of the scientific community is ended.

You will have to fight your way through the bodily defence systems, mutant brain tissue, and carefully pilot your way through several other major organs,

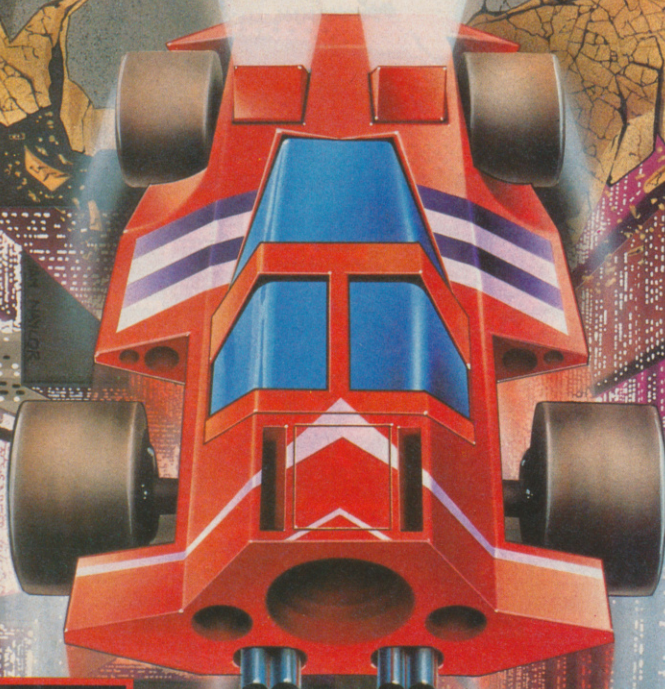
before finally reaching and destroying the rogue brain. Can you avert disaster, find out in early February when *DNA Warrior* appears priced £9.95.

Well, that's it for this month. Only time to mention that **Activision** have just picked up the *Who Framed Roger Rabbit* film licence. Other computer owners will get the overseas programs, but on the Spectrum Activision are handcrafting one all by themselves. So watch out for more information about Eddy Valiant, Roger Rabbit, Baby Herman and many other Toontown characters soon!



"ABSOLUTE CO

THE ULTIMATE DEVASTATION MACHINE



LED STORM™

LAZER ENHANCED DESTRUCTION

LED STORM™ Tear along the highways of the sky, free of the tedium of road hogs and pedestrians, only the twists and turns of a heavenly motorway stretching out before you. But you're more than the angels to keep you company - Kamikaze opponents bar your way, skyjack terrorists blast endless voids in your celestial pathway. The struggle is not all one sided - lazer powered turbos give you unbelievable acceleration and the power to fly, whilst your fusion enhanced controls will enable you to steer a path through the most devastating opposition. The road narrows - the space is tight - time to transform at the speed of light into a nuclear powered jet bike. Take to the skies in an aerial extravaganza of race skills, daredevil pilotry, fearless road warring through nine totally distinct landscapes.

CBM 64/128 £9.99t £14.99d · Atari ST £19.99d · Spectrum 48/128K £8.99t £12.99d
Amiga £19.99 · (1943 £24.99d) · Amstrad CPC £9.99t £14.99d

IN-OP POWER™



1943

1943™ At last, your chance to take part in the Battle of Midway. This sequel to the highly acclaimed '1942' places you at the controls of an American fighter plane. Your mission is to destroy the Japanese carrier Yamato. Exhilarating action!

TIGER ROAD™ An ancient tale from ancient China ... birthplace of martial arts disciplines. As Lee Wong you must halt the savagery of ruthless Ryu Ken Oh by overcoming flying Ninja warriors, awesome dragons and acrobatic Sumo wrestlers to name but a few. You'll need all your martial arts training and skill with the spear, chains and sickle to seek out and defeat Ryn Ken Oh in a furious and bloody battle with the scourge of the Orient.



TIGER ROAD

CAPCOM™

Screen shots from various systems

GIANTS OF THE VIDEO GAMES INDUSTRY

© 1988 CAPCOM CO. LTD. Manufactured under licence from Capcom Co. Ltd., Japan. Tiger Road™, LED Storm™ and 1943™ and CAPCOM™ are trademarks of Capcom Co. Ltd. licensed by GO! Media Holdings Ltd., a division of U.S. Gold Ltd., Units 2/3 Holford Way, Holford, Birmingham B6 7AX. Tel: 021 356 3388

AN INCALCULABLE* AMOUNT OF FUN

*a, beyond calculation; unpredictable; indeterminable; very great

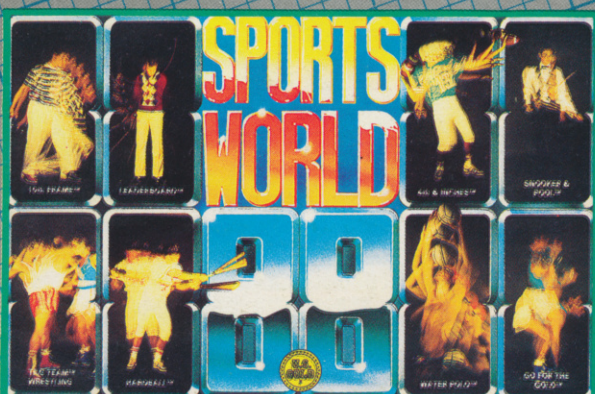
When the golden team take their golden games and add a little bit of golden magic then there's only one outcome... A Giant success. Five giant games squeezed into one giant compilation: - Gauntlet II, Rolling Thunder, Out Run, California Games and 720°.



Giants
CBM 64/128 £12.99 £14.99
Amstrad £12.99 £19.99
Spectrum £12.99 £19.99



Sports World 88
CBM 64/128 £9.99 £14.99

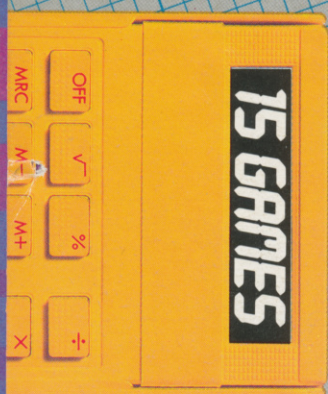


The ultimate collection of eight sporting challenges, the ultimate test of skill, stamina, dexterity and endurance: - 10th Frame, Leaderboard, 4th and Inches, Snooker and Pool, Tag-Team Wrestling, Hardball, Waterpolo and Go for the Gold.

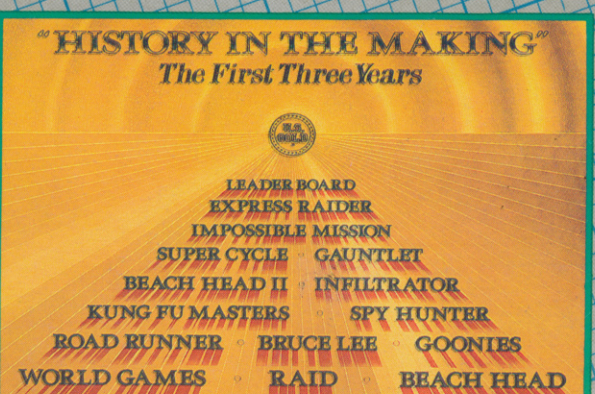
Ten of the most outstanding home computer games - called together for the first time for their own Command Performance: - Xeno, Trantor, Mercenary, Hardball, Bobsleigh, 10th Frame, Leviathan, Cholo, Armageddon Man and Shackled.



Command Performance
CBM 64/128 £12.99 £14.99
Amstrad £12.99 £19.99
Spectrum £12.99 £19.99



History in the Making
CBM 64/128 £24.99 £29.99
Amstrad £24.99 £29.99
Spectrum £24.99



To celebrate the first 3 years of US Gold's immense success 15 true classic games are now available in one memorable collection, History in the Making: - Beachhead, Bruce Lee, Spyhunter, Raid, Goonies, Supercycle, World Games, Express Raider, Infiltrator, Beachhead II, Gauntlet, Road Runner, Impossible Mission, Kung Fu Master and Leaderboard.



US Gold Ltd., Units 2/3, Halford Way,
Halford, Birmingham B6 7AX.
Telephone: 021 356 3366

